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<212> DNA

<213> Homo sapiens

<400> 4655

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 4672

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<211> 2194

<212> DNA

<213> Homo sapiens

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<211> 2262

<212> DNA

<213> Homo sapiens

<400> 4675

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<212> DNA

<213> Homo sapiens

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 gcggacctgt ccgtaccga agccagcagc tccgacagcc gaggagagag ggccgagctc 1200
 tatgcacagg tggaggaggg tctcctggga ggagaagcca gctatctggg ccttccctc 1260
 accccagaga aggacgacgc cctgcatcag gccaccgcgg tggccaacct gcgcgcggcg 1320

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atcaggaaga	agttcaagt	tccgtactgc	agcttctcgg	ccatgcacca	gtgcatcttc	1500
aagcgacaca	tgcgctcgca	cacgggagag	cggccclacc	cctgcgagat	ctgcgggaag	1560
aagttcacgc	ggcgcgagca	catgaagcgc	cacacgtgg	tccacagcaa	ggacaagaag	1620
tatgtgtgca	aggtgtgcag	ccgcgtcttc	atgtccgccc	ccagcgtggg	catcaggcat	1680
ggctccaggc	gccacgggtg	gtgcaccgac	tgtgtcggcc	gcggcattgg	cgggccccctg	1740
gaccatggcg	gaggaggcgg	caggggctct	ccagaggcgc	tgttcccagg	cgacggggccc	1800
tatctggagg	accctgagga	cccacgaggg	gaggcggagg	agctgggcga	ggacgacgag	1860
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tcgaggtagt	tacataaaat	tattttgttt	ggcattattt	ttctcactcg	aagaaactat	3000
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 ttcttcccta aaaccaacag tgtccactg acctcccca gtgtttgtg cgtggcagat 4200
 ttctgttct tgttcgagt ttgccactg aagagtgtgg gatitccgag gccagggtga 4260
 gcacgtccat ctccaggagg gtggaggga aagacatgc atgaagggt tttttatgt 4320
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<210> 4684

<211> 492

<212> PRT

<213> Homo sapiens

<400> 4684

Met Pro Ser Phe Leu Val Pro Ser Leu Val Ser Ser Pro Val Leu Leu
 1 5 10 15
 Lys Leu Leu Phe Ser Pro Gly Pro Lys Thr Ile Trp Ser Leu Trp Gln
 20 25 30
 Gln Pro Met Leu Phe Gln Glu Ala Thr Ala Phe Glu Asn Met Thr Lys
 35 40 45
 Asp Trp Asn Tyr Leu Glu Gly Ser Gln Lys Asp Cys Tyr Arg Asp Thr
 50 55 60
 Met Leu Asp Ser Tyr Glu Asn Thr Val Pro Gln Gly Ser Phe Leu Gln
 65 70 75 80
 Leu Ser Met Met Pro Gln Arg Ala Gly Asn Asp Pro Pro Gly Val Ser
 85 90 95

Asn Ala Ser Glu Met Glu Met Glu Ile Ser Asn Met Arg Glu Lys Phe			
100	105	110	
Leu Met Ser Val Thr Lys Leu Val Glu Ser Lys Ser Tyr Asn Ser Lys			
115	120	125	
Val Phe Ser Lys Glu Lys Tyr Phe Gln Thr Ile Lys Glu Val Lys Glu			
130	135	140	
Ala Lys Glu Lys Gly Lys Lys Ser Ser Arg Asp Tyr Arg Arg Ala Ala			
145	150	155	160
Lys Tyr Asp Val Ile Ser Val Gln Gly Thr Glu Lys Leu Ile Glu Ala			
165	170	175	
Thr His Gly Glu Arg Asp Arg Ile Arg Tyr Tyr Val His Lys Glu Glu			
180	185	190	
Leu Phe Asp Ile Leu His Asp Thr His Leu Ser Ile Gly His Gly Gly			
195	200	205	
Arg Thr Arg Met Leu Lys Glu Leu Gln Gly Lys Tyr Gly Asn Val Thr			
210	215	220	
Lys Glu Val Ile Val Leu Tyr Leu Thr Leu Cys Lys Gln Cys His Gln			
225	230	235	240
Lys Asn Pro Val Pro Lys Arg Gly Leu Ala Pro Lys Pro Met Thr Phe			
245	250	255	
Lys Asp Ile Asp Ser Thr Cys Gln Val Glu Ile Leu Asp Met Gln Ser			
260	265	270	
Ser Ala Asp Gly Glu Phe Lys Phe Ile Leu Tyr Tyr Gln Asp His Ser			
275	280	285	
Thr Lys Phe Ile Ile Leu Arg Pro Leu Arg Thr Lys Gln Ala His Glu			
290	295	300	
Val Val Ser Val Leu Leu Asp Ile Phe Thr Ile Leu Gly Thr Pro Ser			
305	310	315	320
Val Leu Asp Ser Asp Ser Gly Val Glu Phe Thr Asn Gln Val Val His			
325	330	335	
Glu Leu Asn Glu Leu Trp Pro Asp Leu Lys Ile Val Ser Gly Lys Tyr			
340	345	350	
His Pro Gly Gln Ser Gln Gly Ser Leu Glu Gly Ala Ser Arg Asp Val			
355	360	365	
Lys Asn Met Ile Ser Thr Trp Met Gln Ser Asn His Ser Cys His Trp			
370	375	380	

Ala Lys Gly Leu Arg Phe Met Gln Met Val Arg Asn Gln Ala Phe Asp
 385 390 395 400
 Val Ser Leu Gln Gln Ser Pro Phe Glu Ala Met Phe Gly Tyr Lys Ala
 405 410 415
 Lys Phe Gly Leu Tyr Ser Ser Asn Leu Pro Arg Glu Thr Val Ala Thr
 420 425 430
 Leu Gln Thr Glu Glu Glu Leu Glu Ile Ala Glu Glu Gln Leu Glu Asn
 435 440 445
 Ser Leu Trp Ile Arg Gln Glu Glu Arg Ala Glu Ile Gly Ala Asp Arg
 450 455 460
 Ser Asp Met Asp Asp Asp Met Asp Pro Thr Pro Glu Ala Ser Glu Pro
 465 470 475 480
 Ser Thr Ser Gln Gly Thr Ser Gly Leu Leu Cys Trp
 485 490

<210> 4685

<211> 287

<212> PRT

<213> Homo sapiens

<400> 4685

Met Asp Arg Pro Asp Glu Gly Pro Pro Ala Lys Thr Arg Arg Leu Ser
 1 5 10 15
 Ser Ser Glu Ser Pro Gln Arg Asp Pro Pro Pro Pro Pro Pro Pro
 20 25 30
 Pro Leu Leu Arg Leu Pro Leu Pro Pro Pro Gln Gln Arg Pro Arg Leu
 35 40 45
 Gln Glu Glu Thr Glu Ala Ala Gln Val Leu Ala Asp Met Arg Gly Val
 50 55 60
 Gly Leu Gly Pro Ala Leu Pro Pro Pro Pro Pro Tyr Val Ile Leu Glu
 65 70 75 80
 Glu Gly Gly Ile Arg Ala Tyr Phe Thr Leu Gly Ala Glu Cys Pro Gly
 85 90 95
 Trp Asp Ser Thr Ile Glu Ser Gly Tyr Gly Glu Ala Pro Pro Pro Thr
 100 105 110

Glu	Ser	Leu	Glu	Ala	Leu	Pro	Thr	Pro	Glu	Ala	Ser	Gly	Gly	Ser	Leu
115						120						125			
Glu	Ile	Asp	Phe	Gln	Val	Val	Gln	Ser	Ser	Ser	Phe	Gly	Gly	Glu	Gly
130						135						140			
Ala	Leu	Glu	Thr	Cys	Ser	Ala	Val	Gly	Trp	Ala	Pro	Gln	Arg	Leu	Val
145						150						155			
Asp	Pro	Lys	Ser	Lys	Glu	Glu	Ala	Ile	Ile	Ile	Val	Glu	Asp	Glu	Asp
			165						170						
Glu	Asp	Glu	Arg	Glu	Ser	Met	Arg	Ser	Ser	Arg	Arg	Arg	Arg	Arg	Arg
			180						185						
Arg	Arg	Arg	Lys	Gln	Arg	Lys	Val	Lys	Arg	Glu	Ser	Arg	Glu	Arg	Asn
195						200						205			
Ala	Glu	Arg	Met	Glu	Ser	Ile	Leu	Gln	Ala	Leu	Glu	Asp	Ile	Gln	Leu
210						215						220			
Asp	Leu	Glu	Ala	Val	Asn	Ile	Lys	Ala	Gly	Lys	Ala	Phe	Leu	Arg	Leu
225						230						235			
Lys	Arg	Lys	Phe	Ile	Gln	Met	Arg	Arg	Pro	Phe	Leu	Glu	Arg	Arg	Asp
			245						250						
Leu	Ile	Ile	Gln	His	Ile	Pro	Gly	Phe	Trp	Val	Lys	Ala	Leu	His	Ser
			260						265						
Ser	Val	Pro	Gln	Pro	Pro	Gln	Asn	Phe	Asn	Phe	Asp	Gln	Pro	Thr	
275						280						285			

<210> 4686

<211> 196

<212> PRT

<213> Homo sapiens

<400> 4686

Met Ser Glu Gly Pro Gly Cys Met Gly Ser Glu Gly Gln Leu Cys Pro
1 5 10 15
Trp Ser Glu Gly Arg Gln Cys Pro Arg Ser Glu Gly Cys Gln Cys Ala
20 25 30
Gly Ser Glu Gly Arg His Val Leu Gly Ser Glu Gly Arg Gly Cys Ser
35 40 45

Gly Ser Glu Gly Cys Gln Cys Pro Gly Ser Glu Gly Arg Arg Val Leu
 50 55 60
 Arg Phe Glu Gly Trp His Val Leu Gly Ser Glu Gly Gln Arg Val Pro
 65 70 75 80
 Gly Ser Glu Gly Arg Pro Leu Gly Pro Leu Gly Leu Leu Arg Glu Gly
 85 90 95
 Leu Pro Asp Pro Trp Leu Glu His Arg Pro Arg Gly Asp Pro Ser Pro
 100 105 110
 Ser Gly Ala Leu Pro Arg Pro Pro Ser Leu Ser Phe Leu Thr Trp Phe
 115 120 125
 Leu Pro Arg Ser Pro Cys Ile Leu Thr Pro Gly Gly Gly Pro Thr Ser
 130 135 140
 Asn Ser Leu Ser Pro Ala Gly Ala Trp Ala Gly Pro Arg Ser Leu Leu
 145 150 155 160
 Pro Gln Leu Ala Phe Arg Gly Glu Thr Lys Ala Gln Gly Leu Phe Trp
 165 170 175
 Phe Ser Ala Gln Thr Trp Gln Leu Pro Gly Gly Gly Arg Arg Ala Pro
 180 185 190
 Glu Val Gly Ile
 195

<210> 4687

<211> 295

<212> PRT

<213> Homo sapiens

<400> 4687

Met Arg Gly Ser Arg Met Ser Gln Pro Pro Gln Cys Leu Arg Arg Ala
 1 5 10 15
 Gln Ser Ser Cys Cys His Phe Met Val Lys Leu Leu Asp Asp Gly Thr
 20 25 30
 Phe Met Ile Pro Gly Glu Lys Val Ala His Thr Ser Leu Asp Ala Leu
 35 40 45
 Val Thr Phe His Gln Gln Lys Pro Ile Glu Pro Arg Arg Glu Leu Leu
 50 55 60

Thr Gln Pro Cys Arg Gln Lys Asp Pro Ala Asn Val Asp Tyr Glu Asp
 65 70 75 80
 Leu Phe Leu Tyr Ser Asn Ala Val Ala Glu Glu Ala Ala Cys Pro Val
 85 90 95
 Ser Ala Pro Glu Glu Ala Ser Pro Lys Pro Val Leu Cys His Gln Ser
 100 105 110
 Lys Glu Arg Lys Pro Ser Ala Glu Met Asn Gly Ile Thr Thr Lys Glu
 115 120 125
 Ala Thr Ser Ser Cys Pro Pro Lys Ser Pro Leu Gly Glu Thr Arg Gln
 130 135 140
 Lys Leu Trp Arg Ser Leu Lys Met Leu Pro Glu Arg Gly Gln Arg Val
 145 150 155 160
 Arg Gln Gln Leu Lys Ser His Leu Ala Thr Val Asn Leu Ser Ser Leu
 165 170 175
 Leu Asp Val Arg Arg Ser Thr Val Ile Ser Gly Pro Gly Thr Gly Lys
 180 185 190
 Gly Ser Gln Asp His Ser Gly Asp Pro Thr Ser Gly Asp Arg Gly Tyr
 195 200 205
 Thr Asp Pro Cys Val Ala Thr Ser Leu Lys Ser Pro Ser Gln Pro Gln
 210 215 220
 Ala Pro Lys Asp Arg Lys Val Pro Thr Arg Lys Ala Glu Arg Ser Val
 225 230 235 240
 Ser Cys Ile Glu Val Thr Pro Gly Asp Arg Ser Trp His Gln Met Val
 245 250 255
 Val Arg Ala Leu Ser Ser Gln Glu Ser Lys Pro Glu His Gln Gly Leu
 260 265 270
 Ala Glu Pro Glu Asn Asp Gln Leu Pro Glu Glu Tyr Gln Gln Pro Pro
 275 280 285
 Pro Phe Ala Pro Gly Tyr Cys
 290 295

<210> 4688

<211> 594

<212> PRT

<213> Homo sapiens

<400> 4688

Met	Lys	Val	Thr	Leu	Ser	Ala	Leu	Asp	Thr	Ser	Glu	Ser	Ser	Phe	Thr
1				5				10						15	
Pro	Leu	Val	Val	Ile	Glu	Leu	Ala	Gln	Asp	Val	Lys	Glu	Glu	Thr	Lys
			20					25						30	
Glu	Trp	Leu	Lys	Asn	Arg	Ile	Ile	Ala	Lys	Lys	Lys	Asp	Gly	Asp	Asn
			35					40						45	
Asn	Asp	Asp	Phe	Leu	Thr	Met	Ala	Glu	Cys	Gln	Phe	Ile	Ile	Lys	His
			50					55						60	
Glu	Leu	Glu	Asn	Leu	Arg	Ala	Lys	Asp	Glu	Lys	Met	Ile	Pro	Gly	Tyr
65						70					75				80
Pro	Gln	Ala	Lys	Leu	Tyr	Pro	Gly	Lys	Ser	Leu	Leu	Arg	Arg	Leu	Leu
						85						90			95
Thr	Ser	Gly	Ile	Val	Ile	Gln	Val	Phe	Pro	Leu	His	Asp	Ser	Glu	Ala
						100						105			110
Leu	Lys	Lys	Leu	Glu	Asp	Thr	Trp	Tyr	Thr	Arg	Phe	Ala	Leu	Lys	Tyr
						115						120			125
Gln	Pro	Ile	Asp	Ser	Ile	Arg	Gly	Tyr	Phe	Gly	Glu	Thr	Ile	Ala	Leu
						130						135			140
Tyr	Phe	Gly	Phe	Leu	Glu	Tyr	Phe	Thr	Phe	Ala	Leu	Ile	Pro	Met	Ala
145						150						155			160
Val	Ile	Gly	Leu	Pro	Tyr	Tyr	Leu	Phe	Val	Trp	Glu	Asp	Tyr	Asp	Lys
						165						170			175
Tyr	Val	Ile	Phe	Ala	Ser	Phe	Asn	Leu	Ile	Trp	Ser	Thr	Val	Ile	Leu
						180						185			190
Glu	Leu	Trp	Lys	Arg	Gly	Cys	Ala	Asn	Met	Thr	Tyr	Arg	Trp	Gly	Thr
						195						200			205
Leu	Leu	Met	Lys	Arg	Lys	Phe	Glu	Glu	Pro	Arg	Pro	Gly	Phe	His	Gly
						210						215			220
Val	Leu	Gly	Ile	Asn	Ser	Ile	Thr	Gly	Lys	Glu	Glu	Pro	Leu	Tyr	Pro
225						230						235			240
Ser	Tyr	Lys	Arg	Gln	Leu	Arg	Ile	Tyr	Leu	Val	Ser	Leu	Pro	Phe	Val
						245						250			255
Cys	Leu	Cys	Leu	Tyr	Phe	Ser	Leu	Tyr	Val	Met	Met	Ile	Tyr	Phe	Asp
						260						265			270

Met Glu Val Trp Ala Leu Gly Leu His Glu Asn Ser Gly Ser Glu Trp
 275 280 285
 Thr Ser Val Leu Leu Tyr Val Pro Ser Ile Ile Tyr Ala Ile Val Ile
 290 295 300
 Glu Ile Met Asn Arg Leu Tyr Arg Tyr Ala Ala Glu Phe Leu Thr Ser
 305 310 315 320
 Trp Glu Asn His Arg Leu Glu Ser Ala Tyr Gln Asn His Leu Ile Leu
 325 330 335
 Lys Val Leu Val Phe Asn Phe Leu Asn Cys Phe Ala Ser Leu Phe Tyr
 340 345 350
 Ile Ala Phe Val Leu Lys Asp Met Lys Leu Leu Arg Gln Ser Leu Ala
 355 360 365
 Thr Leu Leu Ile Thr Ser Gln Ile Leu Asn Gln Ile Met Glu Ser Phe
 370 375 380
 Leu Pro Tyr Trp Leu Gln Arg Lys His Gly Val Gln Val Lys Arg Lys
 385 390 395 400
 Val Gln Ala Leu Lys Ala Asp Ile Asp Ala Thr Leu Tyr Glu Gln Val
 405 410 415
 Ile Leu Glu Lys Glu Met Gly Thr Tyr Leu Gly Thr Phe Asp Asp Tyr
 420 425 430
 Leu Glu Leu Phe Leu Gln Phe Gly Tyr Val Ser Leu Phe Ser Cys Val
 435 440 445
 Tyr Pro Leu Ala Ala Ala Phe Ala Val Leu Asn Asn Phe Thr Glu Val
 450 455 460
 Asn Ser Asp Ala Leu Lys Met Cys Arg Val Phe Lys Arg Pro Phe Ser
 465 470 475 480
 Glu Pro Ser Ala Asn Ile Gly Val Trp Gln Leu Ala Phe Glu Thr Met
 485 490 495
 Ser Val Ile Ser Val Val Thr Asn Cys Ala Leu Ile Gly Met Ser Pro
 500 505 510
 Gln Val Asn Ala Val Phe Pro Glu Ser Lys Ala Asp Leu Ile Leu Ile
 515 520 525
 Val Val Ala Val Glu His Ala Leu Leu Ala Leu Lys Phe Ile Leu Ala
 530 535 540
 Phe Ala Ile Pro Asp Lys Pro Arg His Ile Gln Met Lys Leu Ala Arg
 545 550 555 560

Leu Glu Phe Glu Ser Leu Glu Ala Leu Lys Gln Gln Gln Met Lys Leu
 565 570 575
 Val Thr Glu Asn Leu Lys Glu Glu Pro Met Glu Ser Gly Lys Glu Lys
 580 585 590 *
 Ala Thr

<210> 4689

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4689

Met Phe Leu Ala Pro Leu Leu His Ser Leu Val Leu Pro Gly Leu Phe
 1 5 10 15
 Leu Ala Pro Pro Leu His Ser Ala Val Leu Pro Gly Met Phe Leu Ala
 20 25 30
 Pro Pro Leu His Ser Pro Val Leu Pro Gly Met Phe Leu Ala Pro Pro
 35 40 45
 Leu His Ser Pro Val Leu Ile Ser His Phe Ser Lys Val Gly Phe Arg
 50 55 60
 Gly Arg Arg Asp Glu Arg Lys Asp Thr Ala Ser His Gly Gly Tyr Gly
 65 70 75 80
 Ser His Leu Val Met Gly Leu Ser Gly Cys Asp Lys Tyr Thr Lys Pro
 85 90 95
 His Phe Phe Ser Trp Gly Ala Phe Gly Glu Leu Leu Trp Arg Pro Ser
 100 105 110
 His Arg Met Leu Glu Asp Gly Phe
 115 120

<210> 4690

<211> 461

<212> PRT

<213> Homo sapiens

<400> 4690

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Met Glu Arg Glu Gly Ile Trp His Ser Thr Leu Gly Glu Thr Trp Glu
 1           5           10           15
Pro Asn Asn Trp Leu Glu Gly Gln Gln Asp Ser His Leu Ser Gln Val
      20           25           30
Gly Val Thr His Lys Glu Thr Phe Thr Glu Met Arg Val Cys Gly Gly
      35           40           45
Asn Glu Phe Glu Arg Cys Ser Ser Gln Asp Ser Ile Leu Asp Thr Gln
      50           55           60
Gln Ser Ile Pro Met Val Lys Arg Pro His Asn Cys Asn Ser His Gly
      65           70           75           80
Glu Asp Ala Thr Gln Asn Ser Glu Leu Ile Lys Thr Gln Arg Met Phe
      85           90           95
Val Gly Lys Lys Ile Tyr Glu Cys Asn Gln Cys Ser Lys Thr Phe Ser
      100          105          110
Gln Ser Ser Ser Leu Leu Lys His Gln Arg Ile His Thr Gly Glu Lys
      115          120          125
Pro Tyr Lys Cys Asn Val Cys Gly Lys His Phe Ile Glu Arg Ser Ser
      130          135          140
Leu Thr Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
      145          150          155          160
Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Met Asn Leu Thr Val His
      165          170          175
Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Gln Cys Lys Glu Cys Gly
      180          185          190
Lys Ala Phe His Lys Asn Ser Ser Leu Ile Gln His Glu Arg Ile His
      195          200          205
Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Thr
      210          215          220
Gln Ser Met Asn Leu Thr Val His Gln Arg Thr His Thr Gly Glu Lys
      225          230          235          240
Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Met His
      245          250          255
Leu Ile Val His Gln Arg Ser His Thr Gly Glu Lys Pro Tyr Glu Cys
      260          265          270

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Ser Gln Cys Gly Lys Ala Phe Ser Lys Ser Ser Thr Leu Thr Leu His
 275 280 285
 Gln Arg Asn His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Lys Cys Gly
 290 295 300
 Lys Ser Phe Ser Gln Ser Thr Tyr Leu Ile Glu His Gln Arg Leu His
 305 310 315 320
 Ser Gly Val Lys Pro Phe Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser
 325 330 335
 Lys Asn Ser Ser Leu Thr Gln His Arg Arg Ile His Thr Gly Glu Lys
 340 345 350
 Pro Tyr Glu Cys Met Val Cys Gly Lys His Phe Thr Gly Arg Ser Ser
 355 360 365
 Leu Thr Val His Gln Val Ile His Thr Gly Glu Lys Pro Tyr Glu Cys
 370 375 380
 Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Ala Tyr Leu Ile Glu His
 385 390 395 400
 Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asp Gln Cys Gly
 405 410 415
 Lys Ala Phe Ile Lys Asn Ser Ser Leu Thr Val His Gln Arg Thr His
 420 425 430
 Thr Gly Glu Lys Pro Tyr Gln Cys Asn Glu Cys Gly Lys Ala Phe Ser
 435 440 445
 Arg Ser Thr Asn Leu Thr Arg His Gln Arg Thr His Thr
 450 455 460

<210> 4691

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4691

Met Thr Ile Ala Thr Pro Phe Val Cys Leu Ile Phe Ala His Ser Gln
 1 5 10 15
 Val Phe Thr Asp Phe Ile Pro Tyr Ser Arg His Leu Gln Met Pro Thr
 20 25 30

Ser Tyr Pro Cys Ser Lys Thr His Phe Lys Cys Pro Leu Leu Trp Glu
 35 40 45
 Met Pro Val Val Pro Leu Asp Thr Asn His Leu Ser Ser Leu Glu Pro
 50 55 60
 Ile Thr His Ala Pro Thr Pro Ile Ser Asn Ala Tyr Ser Ser Arg Lys
 65 70 75 80
 Cys Pro Ser Thr His Gly Gln Lys Ser Ser Leu Leu Leu Thr Ala Asn
 85 90 95
 Thr Ala Ala His Gln Ala Trp Ala Leu Ser His Val Leu Ser Ile Thr
 100 105 110
 Leu Thr Asp Leu Trp Pro Ile Tyr Pro His
 115 120

<210> 4692

<211> 123

<212> PRT

<213> Homo sapiens

<400> 4692

Met Lys Gly Pro Cys Pro His Leu Pro Pro Pro Leu Ser Ser Cys Ile
 1 5 10 15
 Met Asn Glu Thr Ala Ala Ser Leu Leu Pro Glu Val Leu His Phe Arg
 20 25 30
 Leu Gly Cys Asn Gly Ser Ile Ser Ala Gln Cys Asn Leu Cys Phe Pro
 35 40 45
 Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Ala Ala Val Asn Thr
 50 55 60
 Gly Trp Ser Ala Val Val Leu Cys Leu Glu Phe Val Pro Ala Val Gly
 65 70 75 80
 Phe Val Val Leu Leu Thr Ser Arg Met Lys Pro Arg Thr Phe Thr Arg
 85 90 95
 Asn Ile Thr Leu Tyr Gly Cys Thr Thr Val Cys Leu Ser Ile Leu Gln
 100 105 110
 Val Lys Asp Met Trp Val Val Pro Ser Ala Gly
 115 120

<210> 4693

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4693

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Met Asp Leu His His Ser Val Gln Pro Glu Ser Leu Leu Leu Ser Thr
  1              5              10              15
Ala Ser Phe Ser Phe Ser Leu Ile Ile Pro Phe Asn Ser Asn Lys Met
              20              25              30
Thr Trp Pro Ala His Glu Asn Thr Glu Met Arg Pro His Leu Val Ile
              35              40              45
Ser Gly Val Leu Arg Gly Thr Leu Val Val Val Leu Gly Ala Ala Val
              50              55              60
Leu Ser Val Lys Asn Phe Gln Glu Phe Leu Ile Ser Cys Phe His Gln
  65              70              75              80
Asp Ser His Asn Leu Leu Leu Leu Pro Leu Ser Ser Gly Phe Val Pro
              85              90              95
Glu His Ile Ile Arg Lys Ala Ala Ile Ile Thr Ala Tyr Leu Pro Pro
              100             105             110
Ala Pro Leu His Lys His Pro Pro Ser Pro His Cys Ala Lys Gln
              115             120             125

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<210> 4694

<211> 194

<212> PRT

<213> Homo sapiens

<400> 4694

```

Met Asp Arg Pro Ser Leu Val Arg Ser Arg Lys Gln Ser Pro Arg Leu
  1              5              10              15
Ser Ala Ser Ser Gly Asn Phe Ile Pro Pro Tyr His Pro Ser Ser Leu
              20              25              30

```

Gly Lys Val Glu Arg Thr Asn Gly Leu Leu Lys Thr His Leu Thr Lys
 35 40 45
 Leu Ser Leu Gln Leu Lys Lys Asp Trp Thr Ala Leu Leu Pro Phe Ala
 50 55 60
 Leu Leu Arg Ile Arg Ala Tyr Pro Gln Glu Ala Thr Gly Tyr Ser Pro
 65 70 75 80
 Phe Glu Leu Ser Tyr Gly Cys Thr Phe Leu Leu Gly Pro Asn Leu Leu
 85 90 95
 Thr Asp Asn Thr Tyr Ala Asp Met Gln Gln Lys Lys Gln Leu Val Phe
 100 105 110
 Pro His Leu Ser Leu Thr Ala Ser Phe Leu Pro Ser His Leu Ser Leu
 115 120 125
 Pro Pro Ile Leu Pro Leu Lys Leu Leu Pro Ile Asn Pro Phe Leu Leu
 130 135 140
 Met Lys Leu Leu Pro Ile Asn Pro Phe Leu Leu Lys Ala Asn Gly Ser
 145 150 155 160
 Trp Ile Lys Glu Asn Ser Ser Phe Leu Pro His Arg Leu Ile Leu Ser
 165 170 175
 Tyr His Pro Phe Arg Thr Ser Phe Met Trp Val Thr Ser Gln Trp Pro
 180 185 190
 Ile Ser

<210> 4695

<211> 237

<212> PRT

<213> Homo sapiens

<400> 4695

Met Ser Cys Arg His Ser Phe Pro Leu Leu Leu Pro Cys Ser Leu His
 1 5 10 15
 Ser His Ala Phe Leu Ser Ser Cys His Gly Asp Leu Cys Pro Leu Thr
 20 25 30
 Ser His Thr Ala Cys Phe Leu Ala Cys Val Pro Pro Gln Ala Gly Gly

35	40	45
His Phe Gln Ser Ser Phe Thr Pro Cys Val Arg Val Ile Asn Gln Ile		
50	55	60
Trp Ala Pro Val Leu His Pro Leu Cys His Asn Ser Pro Cys Pro Pro		
65	70	75
Asn Leu Pro Gly Thr Arg Phe Gly Ala Met Leu Asp Met Leu Thr Asp		
85	90	95
Arg Cys Ser Thr Met Cys Leu Leu Val Asn Leu Ala Leu Leu Tyr Pro		
100	105	110
Gly Ala Thr Leu Phe Phe Gln Ile Ser Met Ser Leu Asp Val Ala Ser		
115	120	125
His Trp Leu His Leu His Ser Ser Val Val Arg Gly Ser Glu Ser His		
130	135	140
Lys Met Ile Asp Leu Ser Gly Asn Pro Val Leu Arg Ile Tyr Tyr Thr		
145	150	155
Ser Arg Pro Ala Leu Phe Thr Leu Cys Ala Gly Asn Glu Leu Phe Tyr		
165	170	175
Cys Leu Leu Tyr Leu Phe His Phe Ser Glu Gly Pro Leu Val Gly Ser		
180	185	190
Val Gly Leu Phe Arg Met Gly Leu Trp Val Thr Ala Pro Ile Ala Leu		
195	200	205
Leu Lys Ser Leu Ile Ser Val Ile His Leu Ile Thr Ala Ala Arg Asn		
210	215	220
Met Ala Ala Leu Asp Ala Ala Asp Arg Ala Lys Lys Lys		
225	230	235

<210> 4696

<211> 111

<212> PRT

<213> Homo sapiens

<400> 4696

Met Gln Gln Thr Phe Leu Asp Asp Ser Pro His Pro Pro Ser Cys Gln
1 5 10 15
Ala Ser Ala Pro Leu His Phe Ser Phe Ser Glu Trp Ser Leu Arg Arg

```

                20                25                30
Leu Pro Asp Leu Leu Leu Pro Gly Pro Ser Gln Ala Tyr Pro Phe Leu
                35                40                45
Ser Ser Leu Pro Ser Phe Thr Pro Ser Leu Ser Met Glu Pro His Ser
                50                55                60
Gly Gln Asp His Leu Leu Trp Pro Ser Glu Gly Phe Arg Thr Ala Gly
                65                70                75                80
Gly Cys Ser Pro Arg Pro Leu Glu Trp Phe Val Ile Phe Leu Cys Leu
                85                90                95
Val Pro Thr Cys Leu Ser Ser Leu Leu Pro Pro His Ala Ser Ser
                100                105                110

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<210> 4697

<211> 132

<212> PRT

<213> Homo sapiens

<400> 4697

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Met Asn Glu Lys Lys Lys Met Leu Lys Val Ala Arg Glu Lys Gly Gln
  1                5                10                15
Val Thr Tyr Lys Gly Lys Pro Ile Arg Leu Met Val Gly Leu Leu Ala
                20                25                30
Asp Thr Leu Gln Ala Ile Arg Asp Leu Gly Pro Met Phe Asn Ile Ser
                35                40                45
Phe Leu Phe Phe Ser Phe Leu Phe Phe Phe Leu Asp Arg Val Ser Leu
                50                55                60
Cys His Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro
                65                70                75                80
Pro Pro Pro Arg Phe Lys Gln Phe Ser Cys Leu Ser Leu Pro Ser Ser
                85                90                95
Trp Asp Tyr Arg Arg Ala Pro Ser His Leu Ala Asn Phe Cys Ile Phe
                100                105                110
Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro
                115                120                125
Asp Phe Met Ile

```


130

<210> 4698

<211> 665

<212> PRT

<213> Homo sapiens

<400> 4698

```

Met Met Lys Thr Phe Phe Ser Thr Gly Gln Gly Asp Thr Glu Ala Phe
 1             5             10             15
His Thr Gly Thr Leu Gln Arg Gln Ala Ser His His Ile Gly Asp Phe
             20             25             30
Cys Phe Gln Lys Ile Glu Lys Asp Ile His Gly Phe Gln Phe Gln Trp
             35             40             45
Lys Glu Asp Glu Thr Asn Asp His Ala Ala Pro Met Thr Glu Ile Lys
             50             55             60
Glu Leu Thr Gly Ser Thr Gly Gln His Asp Gln Arg His Ala Gly Asn
65             70             75             80
Lys His Ile Lys Asp Gln Leu Gly Leu Ser Phe His Ser His Leu Pro
             85             90             95
Glu Leu His Ile Phe Gln Pro Glu Gly Lys Ile Gly Asn Gln Val Glu
             100            105            110
Lys Ser Ile Asn Asn Ala Ser Ser Val Ser Thr Ser Gln Arg Ile Cys
             115            120            125
Cys Arg Pro Lys Thr His Ile Ser Asn Lys Tyr Gly Asn Asn Ser Leu
             130            135            140
His Ser Ser Leu Leu Thr Gln Lys Arg Asn Val His Met Arg Glu Lys
145            150            155            160
Ser Phe Gln Cys Ile Glu Ser Gly Lys Ser Phe Asn Cys Ser Ser Leu
             165            170            175
Leu Lys Lys His Gln Ile Thr His Leu Glu Glu Lys Gln Cys Lys Cys
             180            185            190
Asp Val Tyr Gly Lys Val Phe Asn Gln Lys Arg Tyr Leu Ala Cys His
             195            200            205

```

Arg Arg Ser His Ile Asp Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 210 215 220
 Lys Ile Phe Gly His Asn Thr Ser Leu Phe Leu His Lys Ala Leu His
 225 230 235 240
 Thr Ala Asp Lys Pro Tyr Glu Cys Glu Glu Cys Asp Lys Val Phe Ser
 245 250 255
 Arg Lys Ser His Leu Glu Thr His Lys Ile Ile Tyr Thr Gly Gly Lys
 260 265 270
 Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Thr Cys Asn Ser Tyr
 275 280 285
 Leu Ala Lys His Thr Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
 290 295 300
 Asn Glu Cys Gly Lys Val Phe Asn Arg Leu Ser Thr Leu Ala Arg His
 305 310 315 320
 Arg Arg Leu His Thr Gly Glu Lys Pro Tyr Glu Cys Glu Glu Cys Glu
 325 330 335
 Lys Val Phe Ser Arg Lys Ser His Leu Glu Arg His Lys Arg Ile His
 340 345 350
 Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala
 355 360 365
 Tyr Asn Ser Tyr Leu Ala Lys His Ser Ile Ile His Thr Gly Glu Lys
 370 375 380
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Gln Ser Thr
 385 390 395 400
 Leu Ala Arg His His Arg Leu His Thr Ala Glu Gln Pro Tyr Lys Cys
 405 410 415
 Glu Glu Cys Asp Lys Val Phe Arg Cys Lys Ser His Leu Glu Arg His
 420 425 430
 Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp
 435 440 445
 Lys Ala Phe Arg Ser Asp Ser Cys Leu Thr Glu His Gln Arg Val His
 450 455 460
 Thr Gly Glu Lys Pro Tyr Thr Cys Asn Glu Cys Gly Lys Val Phe Ser
 465 470 475 480
 Thr Lys Ala Asn Leu Ala Cys His His Lys Leu His Thr Ala Glu Lys
 485 490 495

Pro Tyr Lys Cys Glu Glu Cys Glu Lys Val Phe Ser Arg Lys Ser His
 500 505 510
 Met Glu Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
 515 520 525
 Lys Val Cys Asp Lys Ala Phe Arg Arg Asp Ser His Leu Ala Gln His
 530 535 540
 Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 545 550 555 560
 Lys Thr Phe Arg Gln Thr Ser Ser Leu Ile Ile His Arg Arg Leu His
 565 570 575
 Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser
 580 585 590
 Gln Met Ser Ser Leu Val Tyr His His Arg Leu His Ser Gly Glu Lys
 595 600 605
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Gln Ala His
 610 615 620
 Leu Ala Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys
 625 630 635 640
 Asn Glu Cys Gly Lys Thr Phe Ser Gln Met Ser Asn Leu Val Tyr His
 645 650 655
 His Arg Leu His Ser Gly Glu Lys Pro
 660 665

<210> 4699

<211> 986

<212> PRT

<213> Homo sapiens

<400> 4699

Met Pro Arg Ala Thr Trp Ala Asn Ser Lys Glu Arg Ser Trp Ala Glu
 1 5 10 15
 Ser Glu Arg Gly Pro Arg Asp Thr Gly Asn Gly Gly Ser Lys Ala Glu
 20 25 30
 Arg His Ile Gln Glu Ile Glu Thr Gly Arg Gly Gly Asp Arg Ala Lys
 35 40 45

Ala His Arg Arg Gln Arg Met Arg Leu Arg Gly Thr Glu Arg Ala Ser
 50 55 60
 Leu Gly Pro Gly Arg Arg Leu Gly Asp Ser Arg Gly Thr Asp Met Pro
 65 70 75 80
 Gly Ala Arg Ala Gln Gly Leu Ala Ala Ala Met Thr Glu Glu Ser Glu
 85 90 95
 Glu Thr Val Leu Tyr Ile Glu His Arg Tyr Val Cys Ser Glu Cys Asn
 100 105 110
 Gln Leu Tyr Gly Ser Leu Glu Glu Val Leu Met His Gln Asn Ser His
 115 120 125
 Val Pro Gln Gln His Phe Glu Leu Val Gly Val Ala Asp Pro Gly Val
 130 135 140
 Thr Val Ala Thr Asp Thr Ala Ser Gly Thr Gly Leu Tyr Gln Thr Leu
 145 150 155 160
 Val Gln Glu Ser Gln Tyr Gln Cys Leu Glu Cys Gly Gln Leu Leu Met
 165 170 175
 Ser Pro Ser Gln Leu Leu Glu His Gln Glu Leu His Leu Lys Met Met
 180 185 190
 Ala Pro Gln Glu Ala Val Pro Ala Glu Pro Ser Pro Lys Ala Pro Pro
 195 200 205
 Leu Ser Ser Ser Thr Ile His Tyr Glu Cys Val Asp Cys Lys Ala Leu
 210 215 220
 Phe Ala Ser Gln Glu Leu Trp Leu Asn His Arg Gln Thr His Leu Arg
 225 230 235 240
 Ala Thr Pro Thr Lys Ala Pro Ala Pro Val Val Leu Gly Ser Pro Val
 245 250 255
 Val Leu Gly Pro Pro Val Gly Gln Ala Arg Val Ala Val Glu His Ser
 260 265 270
 Tyr Arg Lys Ala Glu Glu Gly Gly Glu Gly Ala Thr Val Pro Ser Ala
 275 280 285
 Ala Ala Thr Thr Thr Glu Val Val Thr Glu Val Glu Leu Leu Leu Tyr
 290 295 300
 Lys Cys Ser Glu Cys Ser Gln Leu Phe Gln Leu Pro Ala Asp Phe Leu
 305 310 315 320
 Glu His Gln Ala Thr His Phe Pro Ala Pro Val Pro Glu Ser Gln Glu
 325 330 335

Pro Ala Leu Gln Gln Glu Val Gln Ala Ser Ser Pro Ala Glu Val Pro
 340 345 350
 Val Ser Gln Pro Asp Pro Leu Pro Ala Ser Asp His Ser Tyr Glu Leu
 355 360 365
 Arg Asn Gly Glu Ala Ile Gly Arg Asp Arg Arg Gly Arg Arg Ala Arg
 370 375 380
 Arg Asn Asn Ser Gly Glu Ala Gly Gly Ala Ala Thr Gln Glu Leu Phe
 385 390 395 400
 Cys Ser Ala Cys Asp Gln Leu Phe Leu Ser Pro His Gln Leu Gln Gln
 405 410 415
 His Leu Arg Ser His Arg Glu Gly Val Phe Lys Cys Pro Leu Cys Ser
 420 425 430
 Arg Val Phe Pro Ser Pro Ser Ser Leu Asp Gln His Leu Gly Asp His
 435 440 445
 Ser Ser Glu Ser His Phe Leu Cys Val Asp Cys Gly Leu Ala Phe Gly
 450 455 460
 Thr Glu Ala Leu Leu Leu Ala His Arg Arg Ala His Thr Pro Asn Pro
 465 470 475 480
 Leu His Ser Cys Pro Cys Gly Lys Thr Phe Val Asn Leu Thr Lys Phe
 485 490 495
 Leu Tyr His Arg Arg Thr His Gly Val Gly Gly Val Pro Leu Pro Thr
 500 505 510
 Thr Pro Val Pro Pro Glu Glu Pro Val Ile Gly Phe Pro Glu Pro Ala
 515 520 525
 Pro Ala Glu Thr Gly Glu Pro Glu Ala Pro Glu Pro Pro Val Ser Glu
 530 535 540
 Glu Thr Ser Ala Gly Pro Ala Ala Pro Gly Thr Tyr Arg Cys Leu Leu
 545 550 555 560
 Cys Ser Arg Glu Phe Gly Lys Ala Leu Gln Leu Thr Arg His Gln Arg
 565 570 575
 Phe Val His Arg Leu Glu Arg Arg His Lys Cys Ser Ile Cys Gly Lys
 580 585 590
 Met Phe Lys Lys Lys Ser His Val Arg Asn His Leu Arg Thr His Thr
 595 600 605
 Gly Glu Arg Pro Phe Pro Cys Pro Asp Cys Ser Lys Pro Phe Asn Ser
 610 615 620

Pro Ala Asn Leu Ala Arg His Arg Leu Thr His Thr Gly Glu Arg Pro
 625 630 635 640
 Tyr Arg Cys Gly Asp Cys Gly Lys Ala Phe Thr Gln Ser Ser Thr Leu
 645 650 655
 Arg Gln His Arg Leu Val His Ala Gln His Phe Pro Tyr Arg Cys Gln
 660 665 670
 Glu Cys Gly Val Arg Phe His Arg Pro Tyr Arg Leu Leu Met His Arg
 675 680 685
 Tyr His His Thr Gly Glu Tyr Pro Tyr Lys Cys Arg Glu Cys Pro Arg
 690 695 700
 Ser Phe Leu Leu Arg Arg Leu Leu Glu Val His Gln Leu Val Val His
 705 710 715 720
 Ala Gly Arg Gln Pro His Arg Cys Pro Ser Cys Gly Ala Ala Phe Pro
 725 730 735
 Ser Ser Leu Arg Leu Arg Glu His Arg Cys Ala Ala Ala Ala Ala Gln
 740 745 750
 Ala Pro Arg Arg Phe Glu Cys Gly Thr Cys Gly Lys Lys Val Gly Ser
 755 760 765
 Ala Ala Arg Leu Gln Ala His Glu Ala Ala His Ala Ala Ala Gly Pro
 770 775 780
 Gly Glu Val Leu Ala Lys Glu Pro Pro Ala Pro Arg Ala Pro Arg Ala
 785 790 795 800

 Thr Arg Ala Pro Val Ala Ser Pro Ala Ala Leu Gly Ser Thr Ala Thr
 805 810 815
 Ala Ser Pro Ala Ala Pro Ala Arg Arg Arg Gly Leu Glu Cys Ser Glu
 820 825 830
 Cys Lys Lys Leu Phe Ser Thr Glu Thr Ser Leu Gln Val His Arg Arg
 835 840 845
 Ile His Thr Gly Glu Arg Pro Tyr Pro Cys Pro Asp Cys Gly Lys Ala
 850 855 860
 Phe Arg Gln Ser Thr His Leu Lys Asp His Arg Arg Leu His Thr Gly
 865 870 875 880
 Glu Arg Pro Phe Ala Cys Glu Val Cys Gly Lys Ala Phe Ala Ile Ser
 885 890 895
 Met Arg Leu Ala Glu His Arg Arg Ile His Thr Gly Glu Arg Pro Tyr

	900		905		910										
Ser	Cys	Pro	Asp	Cys	Gly	Lys	Ser	Tyr	Arg	Ser	Phe	Ser	Asn	Leu	Trp
	915		920		925										
Lys	His	Arg	Lys	Thr	His	Gln	Gln	Gln	His	Gln	Ala	Ala	Val	Arg	Gln
	930		935		940										
Gln	Leu	Ala	Glu	Ala	Glu	Ala	Ala	Val	Gly	Leu	Ala	Val	Met	Glu	Thr
945			950		955				960						
Ala	Val	Glu	Ala	Leu	Pro	Leu	Val	Glu	Ala	Ile	Glu	Ile	Tyr	Pro	Leu
			965		970				975						
Ala	Glu	Ala	Glu	Gly	Val	Gln	Ile	Ser	Gly						
	980		985												

<210> 4700

<211> 441

<212> PRT

<213> Homo sapiens

<400> 4700

Met	Glu	Tyr	Asp	Glu	Lys	Leu	Ala	Arg	Phe	Arg	Gln	Ala	His	Leu	Asn
1				5				10					15		
Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
			20					25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
			35					40					45		
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Leu	Arg	Gln	Ala	Ile	Glu
65					70					75				80	
Glu	Cys	Lys	Gln	Val	Ile	Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln
			85						90					95	
Lys	Asp	Ala	Val	Val	Arg	Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu
		100						105					110		
Leu	Lys	Asp	Pro	Asn	Glu	Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu
		115						120					125		
His	Arg	Phe	Tyr	Lys	Glu	Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp

130	135	140	
Lys Cys Asn Thr Ile Ile Trp Gly Leu Ile Gln Thr Trp Tyr Thr Cys			
145	150	155	160
Thr Gly Cys Tyr Tyr Arg Cys His Ser Lys Cys Leu Asn Leu Ile Ser			
	165	170	175
Lys Pro Cys Val Ser Ser Lys Val Ser His Gln Ala Glu Tyr Glu Leu			
	180	185	190
Asn Ile Cys Pro Glu Thr Gly Leu Asp Ser Gln Asp Tyr Arg Cys Ala			
	195	200	205
Glu Cys Arg Val Pro Ile Ser Leu Arg Gly Val Pro Ser Glu Ala Arg			
210	215	220	
Gln Cys Asp Tyr Thr Gly Gln Tyr Tyr Cys Ser His Cys His Trp Asn			
225	230	235	240
Asp Leu Ala Val Ile Pro Ala Arg Val Val His Asn Trp Asp Phe Glu			
	245	250	255
Pro Arg Lys Val Ser Arg Cys Ser Met Arg Tyr Leu Ala Leu Met Val			
	260	265	270
Ser Arg Pro Val Leu Arg Leu Arg Glu Ile Asn Pro Leu Leu Phe Ser			
	275	280	285
Tyr Val Glu Glu Leu Val Glu Ile Arg Lys Leu Arg Gln Asp Ile Leu			
290	295	300	
Leu Met Lys Pro Tyr Phe Ile Thr Cys Arg Glu Ala Met Glu Ala Arg			
305	310	315	320
Leu Leu Leu Gln Leu Gln Asp Arg Gln His Phe Val Glu Asn Asp Glu			
	325	330	335
Met Tyr Ser Val Gln Asp Leu Leu Asp Val His Ala Gly Arg Leu Gly			
	340	345	350
Cys Ser Leu Thr Glu Ile His Thr Leu Phe Ala Lys His Ile Lys Leu			
	355	360	365
Asp Cys Glu Arg Cys Gln Ala Lys Gly Phe Val Cys Glu Leu Cys Arg			
	370	375	380
Glu Gly Asp Val Leu Phe Pro Phe Asp Ser His Thr Ser Val Cys Ala			
385	390	395	400
Asp Cys Ser Ala Val Phe His Arg Asp Cys Tyr Tyr Asp Asn Ser Thr			
	405	410	415
Thr Cys Pro Lys Cys Ala Arg Leu Ser Leu Arg Lys Gln Ser Leu Phe			

420 425 430
 Gln Glu Pro Gly Pro Asp Val Glu Ala
 435 440

<210> 4701

<211> 1389

<212> PRT

<213> Homo sapiens

<400> 4701

Met Lys Gln Leu Gln Pro Gln Pro Pro Pro Lys Met Gly Asp Phe Tyr
 1 5 10 15
 Asp Pro Glu His Pro Thr Pro Glu Glu Glu Glu Asn Glu Ala Lys Ile
 20 25 30
 Glu Asn Val Gln Lys Thr Gly Phe Ile Lys Gly Pro Met Phe Lys Gly
 35 40 45
 Val Ala Ser Ser Arg Phe Leu Pro Lys Gly Thr Lys Thr Lys Val Asn
 50 55 60
 Leu Glu Glu Gln Gly Arg Gln Lys Val Ser Phe Ser Phe Ser Leu Thr
 65 70 75 80
 Lys Lys Thr Leu Gln Asn Arg Phe Leu Thr Ala Leu Gly Asn Glu Lys
 85 90 95
 Gln Ser Asp Thr Pro Asn Pro Pro Ala Val Pro Leu Gln Val Asp Ser
 100 105 110
 Thr Pro Lys Met Lys Met Glu Ile Gly Asp Thr Leu Ser Thr Ala Glu
 115 120 125
 Glu Ser Ser Pro Pro Lys Ser Arg Val Glu Leu Gly Lys Ile His Phe
 130 135 140
 Lys Lys His Leu Leu His Val Thr Ser Arg Pro Leu Leu Ala Thr Thr
 145 150 155 160
 Thr Ala Val Ala Ser Pro Pro Thr His Ala Ala Pro Leu Pro Ala Val
 165 170 175
 Ile Ala Glu Ser Thr Thr Val Asp Ser Pro Pro Ser Ser Pro Pro Pro
 180 185 190
 Pro Pro Pro Pro Ala Gln Ala Thr Thr Leu Ser Ser Pro Ala Pro Val

195	200	205
Thr Glu Pro Val Ala Leu Pro His Thr Pro Ile Thr Val Leu Met Ala		
210	215	220
Ala Pro Val Pro Leu Pro Val Asp Val Ala Val Arg Ser Leu Lys Glu		
225	230	235
Pro Pro Ile Ile Ile Val Pro Glu Ser Leu Glu Ala Asp Thr Lys Gln		
245	250	255
Asp Thr Ile Ser Asn Ser Leu Glu Glu His Val Thr Gln Ile Leu Asn		
260	265	270
Glu Gln Ala Asp Ile Ser Ser Lys Lys Glu Asp Ser His Ile Gly Lys		
275	280	285
Asp Glu Glu Ile Pro Asp Ser Ser Lys Ile Ser Leu Ser Cys Lys Lys		
290	295	300
Thr Gly Ser Lys Lys Lys Ser Ser Gln Ser Glu Gly Ile Phe Leu Gly		
305	310	315
Ser Glu Ser Asp Glu Asp Ser Val Arg Thr Ser Ser Ser Gln Arg Ser		
325	330	335
His Asp Leu Lys Phe Ser Ala Ser Ile Glu Lys Glu Arg Asp Phe Lys		
340	345	350
Lys Ser Ser Ala Pro Leu Lys Ser Glu Asp Leu Gly Lys Pro Ser Arg		
355	360	365
Ser Lys Thr Asp Arg Asp Asp Lys Tyr Phe Ser Tyr Ser Lys Leu Glu		
370	375	380
Arg Asp Thr Arg Tyr Val Ser Ser Arg Cys Arg Ser Glu Arg Glu Arg		
385	390	395
Arg Arg Ser Arg Ser His Ser Arg Ser Glu Arg Gly Ser Arg Thr Asn		
405	410	415
Leu Ser Tyr Ser Arg Ser Glu Arg Ser His Tyr Tyr Asp Ser Asp Arg		
420	425	430
Arg Tyr His Arg Ser Ser Pro Tyr Arg Glu Arg Thr Arg Tyr Ser Gln		
435	440	445
Pro Tyr Thr Asp Asn Arg Ala Arg Glu Ser Ser Asp Ser Glu Glu Glu		
450	455	460
Tyr Lys Lys Thr Tyr Ser Arg Arg Thr Ser Ser His Ser Ser Ser Tyr		
465	470	475
Arg Asp Leu Arg Thr Ser Ser Tyr Ser Lys Ser Asp Arg Asp Cys Lys		

	485		490		495
Thr Glu Thr Ser Tyr Leu Glu Met Glu Arg Arg Gly Lys Tyr Ser Ser					
	500		505		510
Lys Leu Glu Arg Glu Ser Lys Arg Thr Ser Glu Asn Glu Ala Ile Lys					
	515		520		525
Arg Cys Cys Ser Pro Pro Asn Glu Leu Gly Phe Arg Arg Gly Ser Ser					
	530		535		540
Tyr Ser Lys His Asp Ser Ser Ala Ser Arg Tyr Lys Ser Thr Leu Ser					
545		550		555	560
Lys Pro Ile Pro Lys Ser Asp Lys Phe Lys Asn Ser Phe Cys Cys Thr					
	565		570		575
Glu Leu Asn Glu Glu Ile Lys Gln Ser His Ser Phe Ser Leu Gln Thr					
	580		585		590
Pro Cys Ser Lys Gly Ser Glu Leu Arg Met Ile Asn Lys Asn Pro Glu					
	595		600		605
Arg Glu Lys Ala Gly Ser Pro Ala Pro Ser Asn Arg Leu Asn Asp Ser					
	610		615		620
Pro Thr Leu Lys Lys Leu Asp Glu Leu Pro Ile Phe Lys Ser Glu Phe					
625		630		635	640
Ile Thr His Asp Ser His Asp Ser Ile Lys Glu Leu Asp Ser Leu Ser					
	645		650		655
Lys Val Lys Asn Asp Gln Leu Arg Ser Phe Cys Pro Ile Glu Leu Asn					
	660		665		670
Ile Asn Gly Ser Pro Gly Ala Glu Ser Asp Leu Ala Thr Phe Cys Thr					
	675		680		685
Ser Lys Thr Asp Ala Val Leu Met Thr Ser Asp Asp Ser Val Thr Gly					
	690		695		700
Ser Glu Leu Ser Pro Leu Val Lys Ala Cys Met Leu Ser Ser Asn Gly					
705		710		715	720
Phe Gln Asn Ile Ser Arg Cys Lys Glu Lys Asp Leu Asp Asp Thr Cys					
	725		730		735
Met Leu His Lys Lys Ser Glu Ser Pro Phe Arg Glu Thr Glu Pro Leu					
	740		745		750
Val Ser Pro His Gln Asp Lys Leu Met Ser Met Pro Val Met Thr Val					
	755		760		765
Asp Tyr Ser Lys Thr Val Val Lys Glu Pro Val Asp Thr Arg Val Ser					

770	775	780	
Cys Cys Lys Thr Lys Asp Ser Asp Ile Tyr Cys Thr Leu Asn Asp Ser			
785	790	795	800
Asn Pro Ser Leu Cys Asn Ser Glu Ala Glu Asn Ile Glu Pro Ser Val			
	805	810	815
Met Lys Ile Ser Ser Asn Ser Phe Met Asn Val His Leu Glu Ser Lys			
	820	825	830
Pro Val Ile Cys Asp Ser Arg Asn Leu Thr Asp His Ser Lys Phe Ala			
	835	840	845
Cys Glu Glu Tyr Lys Gln Ser Ile Gly Ser Thr Ser Ser Ala Ser Val			
	850	855	860
Asn His Phe Asp Asp Leu Tyr Gln Pro Ile Gly Ser Ser Gly Ile Ala			
865	870	875	880
Ser Ser Leu Gln Ser Leu Pro Pro Gly Ile Lys Val Asp Ser Leu Thr			
	885	890	895
Leu Leu Lys Cys Gly Glu Asn Thr Ser Pro Val Leu Asp Ala Val Leu			
	900	905	910
Lys Ser Lys Lys Ser Ser Glu Phe Leu Lys His Ala Gly Lys Glu Thr			
	915	920	925
Ile Val Glu Val Gly Ser Asp Leu Pro Asp Ser Gly Lys Gly Phe Ala			
	930	935	940
Ser Arg Glu Asn Arg Arg Asn Asn Gly Leu Ser Gly Lys Cys Leu Gln			
945	950	955	960
Glu Ala Gln Glu Glu Gly Asn Ser Ile Leu Pro Glu Arg Arg Gly Arg			
	965	970	975
Pro Glu Ile Ser Leu Asp Glu Arg Gly Glu Gly Gly His Val His Thr			
	980	985	990
Ser Asp Asp Ser Glu Val Val Phe Ser Ser Cys Asp Leu Asn Leu Thr			
	995	1000	1005
Met Glu Asp Ser Asp Gly Val Thr Tyr Ala Leu Lys Cys Asp Ser Ser			
	1010	1015	1020
Gly His Ala Pro Glu Ile Val Ser Thr Val His Glu Asp Tyr Ser Gly			
1025	1030	1035	1040
Ser Ser Glu Ser Ser Asn Asp Glu Ser Asp Ser Glu Asp Thr Asp Ser			
	1045	1050	1055
Asp Asp Ser Ser Ile Pro Arg Asn Arg Leu Gln Ser Val Val Val Val			

1060	1065	1070
Pro Lys Asn Ser Thr Leu Pro Met Glu Glu Thr Ser Pro Cys Ser Ser		
1075	1080	1085
Arg Ser Ser Gln Ser Tyr Arg His Tyr Ser Asp His Trp Glu Asp Glu		
1090	1095	1100
Arg Leu Glu Ser Arg Arg His Leu Tyr Glu Glu Lys Phe Glu Ser Ile		
1105	1110	1115
Ala Ser Lys Ala Cys Pro Gln Thr Asp Lys Phe Phe Leu His Lys Gly		
1125	1130	1135
Thr Glu Lys Asn Pro Glu Ile Ser Phe Thr Gln Ser Ser Arg Lys Gln		
1140	1145	1150
Ile Asp Asn Arg Leu Pro Glu Leu Ser His Pro Gln Ser Asp Gly Val		
1155	1160	1165
Asp Ser Thr Ser His Thr Asp Val Lys Ser Asp Pro Leu Gly His Pro		
1170	1175	1180
Asn Ser Glu Glu Thr Val Lys Ala Lys Ile Pro Ser Arg Gln Gln Glu		
1185	1190	1195
Glu Leu Pro Ile Tyr Ser Ser Asp Phe Glu Asp Phe Pro Asn Lys Ser		
1205	1210	1215
Trp Gln Gln Thr Thr Phe Gln Asn Arg Pro Asp Ser Arg Leu Gly Lys		
1220	1225	1230
Thr Glu Leu Ser Phe Ser Ser Ser Cys Glu Ile Pro His Val Asp Gly		
1235	1240	1245
Leu His Ser Ser Glu Glu Leu Arg Asn Leu Gly Trp Asp Phe Ser Gln		
1250	1255	1260
Glu Lys Pro Ser Thr Thr Tyr Gln Gln Pro Asp Ser Ser Tyr Gly Ala		
1265	1270	1275
Cys Gly Gly His Lys Tyr Gln Gln Asn Ala Glu Gln Tyr Gly Gly Thr		
1285	1290	1295
Arg Asp Tyr Trp Gln Gly Asn Gly Tyr Trp Asp Pro Arg Ser Gly Arg		
1300	1305	1310
Pro Pro Gly Thr Gly Val Val Tyr Asp Arg Thr Gln Gly Gln Val Pro		
1315	1320	1325
Asp Ser Leu Thr Asp Asp Arg Glu Glu Glu Glu Asn Trp Asp Gln Gln		
1330	1335	1340
Asp Gly Ser His Phe Ser Asp Gln Ser Asp Lys Phe Leu Leu Ser Leu		

1345 1350 1355 1360
 Gln Lys Asp Lys Gly Ser Val Gln Ala Pro Glu Ile Ser Ser Asn Ser
 1365 1370 1375
 Ile Lys Asp Thr Leu Ala Val Asn Glu Lys Lys Asp Phe
 1380 1385

<210> 4702

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4702

Met Val Gly Leu Leu Phe His Ala Pro Lys Ala Pro Glu Met Ala Pro
 1 5 10 15
 Leu Arg Cys Cys Ile Met Asn Lys Ile Ile Met Val Arg Arg Pro Lys
 20 25 30
 Gln Ser Thr Ala Asp Tyr Gly Met Arg Thr Ser Gly Pro Val Glu Ser
 35 40 45
 Gly Leu Ser Ala Asp Ser Leu Gln Leu Leu Cys Ser Tyr Ala Ala Ile
 50 55 60
 Lys Asn Ser Ala Glu Leu Leu Met Val Gly Pro Gln Gly Met Arg Pro
 65 70 75 80
 Ala Thr Gly Gln Asp Leu Leu Cys Arg Pro Cys Leu Ser His Asp Pro
 85 90 95
 Pro Gly Pro Leu His Pro Pro Arg Gly Leu Ser Gly Ser Ser Ser Leu
 100 105 110
 Leu Ile Ser Pro Arg Leu Gln Asp Val Ser Leu Gln Leu Val His Pro
 115 120 125
 Thr Pro Glu Glu Ser Phe

130

<210> 4703

<211> 743

<212> PRT

<213> Homo sapiens

<400> 4703

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Met Ser Ser Leu Ala Ala Lys Arg Leu Gly Met Asn Arg Arg Pro Ala
  1             5             10             15
Gly Ser Gly Gly Gly Gly Gly Glu Ala Ala Thr Trp Gly His Arg Phe
          20             25             30
Trp Arg Pro Gln Glu Arg Pro Thr Asp Arg Asn Gln Gly Glu Met Ala
      35             40             45
His Thr Cys Arg Gly Thr Ile Asn Leu Ser Thr Ala His Ile Asp Thr
      50             55             60
Glu Asp Ser Cys Gly Ile Leu Leu Thr Ser Gly Ala Arg Ser Tyr His
      65             70             75             80
Leu Lys Ala Ser Ser Glu Val Asp Arg Gln Gln Trp Ile Thr Ala Leu
          85             90             95
Glu Leu Ala Lys Ala Lys Ala Val Arg Val Met Asn Thr His Ser Asp
      100             105             110
Asp Ser Gly Asp Asp Asp Glu Ala Thr Thr Pro Ala Asp Lys Ser Glu
      115             120             125
Leu His His Thr Leu Lys Asn Leu Ser Leu Lys Leu Asp Asp Leu Ser
      130             135             140
Thr Cys Asn Asp Leu Ile Ala Lys His Gly Ala Ala Leu Gln Arg Ser
      145             150             155             160
Leu Thr Glu Leu Asp Gly Leu Lys Ile Pro Ser Glu Ser Gly Glu Lys
          165             170             175
Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe Arg Ile Thr Ser Asn
          180             185             190
Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu Leu Ala Glu Ile His
          195             200             205
Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu Gln Glu Gln Arg Val
          210             215             220
His Leu Glu Glu Thr Ile Glu Gln Leu Ala Lys Gln His Asn Ser Leu
      225             230             235             240
Glu Arg Ala Phe His Ser Ala Pro Gly Arg Pro Ala Asn Pro Ser Lys
          245             250             255

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Ser Phe Ile Glu Gly Ser Leu Leu Thr Pro Lys Gly Glu Asp Ser Glu
 260 265 270
 Glu Asp Glu Asp Thr Glu Tyr Phe Asp Ala Met Glu Asp Ser Thr Ser
 275 280 285
 Phe Ile Thr Val Ile Thr Glu Ala Lys Glu Asp Ser Arg Lys Ala Glu
 290 295 300
 Gly Ser Thr Gly Thr Ser Ser Val Asp Trp Ser Ser Ala Asp Asn Val
 305 310 315 320
 Leu Asp Gly Ala Ser Leu Val Pro Lys Gly Ser Ser Lys Val Lys Arg
 325 330 335
 Arg Val Arg Ile Pro Asn Lys Pro Asn Tyr Ser Leu Asn Leu Trp Ser
 340 345 350
 Ile Met Lys Asn Cys Ile Gly Arg Glu Leu Ser Arg Ile Pro Met Pro
 355 360 365
 Val Asn Phe Asn Glu Pro Leu Ser Met Leu Gln Arg Leu Thr Glu Asp
 370 375 380
 Leu Glu Tyr His His Leu Leu Asp Lys Ala Val His Cys Thr Ser Ser
 385 390 395 400
 Val Glu Gln Met Cys Leu Val Ala Ala Phe Ser Val Ser Ser Tyr Ser
 405 410 415
 Thr Thr Val His Arg Ile Ala Lys Pro Phe Asn Pro Met Leu Gly Glu
 420 425 430
 Thr Phe Glu Leu Asp Arg Leu Asp Asp Met Gly Leu Arg Ser Leu Cys
 435 440 445
 Glu Gln Val Ser His His Pro Pro Ser Ala Ala His Tyr Val Phe Ser
 450 455 460
 Lys His Gly Trp Ser Leu Trp Gln Glu Ile Thr Ile Ser Ser Lys Phe
 465 470 475 480
 Arg Gly Lys Tyr Ile Ser Ile Met Pro Leu Gly Ala Ile His Leu Glu
 485 490 495
 Phe Gln Ala Ser Gly Asn His Tyr Val Trp Arg Lys Ser Thr Ser Thr
 500 505 510
 Val His Asn Ile Ile Val Gly Lys Leu Trp Ile Asp Gln Ser Gly Asp
 515 520 525
 Ile Glu Ile Val Asn His Lys Thr Asn Asp Arg Cys Gln Leu Lys Phe
 530 535 540

Leu Pro Tyr Ser Tyr Phe Ser Lys Glu Ala Ala Arg Lys Val Thr Gly
 545 550 555 560
 Val Val Ser Asp Ser Gln Gly Lys Ala His Tyr Val Leu Ser Gly Ser
 565 570 575
 Trp Asp Glu Gln Met Glu Cys Ser Lys Val Met His Ser Ser Pro Ser
 580 585 590
 Ser Pro Ser Ser Asp Gly Lys Gln Lys Thr Val Tyr Gln Thr Leu Ser
 595 600 605
 Ala Lys Leu Leu Trp Lys Lys Tyr Pro Leu Pro Glu Asn Ala Glu Asn
 610 615 620
 Met Tyr Tyr Phe Ser Glu Leu Ala Leu Thr Leu Asn Glu His Glu Glu
 625 630 635 640
 Gly Val Ala Pro Thr Asp Ser Arg Leu Arg Pro Asp Gln Arg Leu Met
 645 650 655
 Glu Lys Gly Arg Trp Asp Glu Ala Asn Thr Glu Lys Gln Arg Leu Glu
 660 665 670
 Glu Lys Gln Arg Leu Ser Arg Arg Arg Arg Leu Glu Ala Cys Gly Pro
 675 680 685
 Gly Ser Ser Cys Ser Ser Glu Glu Glu Lys Glu Ala Asp Ala Tyr Thr
 690 695 700
 Pro Leu Trp Phe Glu Lys Arg Leu Asp Pro Leu Thr Gly Glu Met Ala
 705 710 715 720
 Cys Val Tyr Lys Gly Gly Tyr Trp Glu Ala Lys Glu Lys Gln Asp Trp
 725 730 735
 His Met Cys Pro Asn Ile Phe
 740

<210> 4704

<211> 577

<212> PRT

<213> Homo sapiens

<400> 4704

Met Glu Asn Glu Arg Thr Lys Asp Leu Ile Ile Glu Gln Arg Phe His
 1 5 10 15

Arg Thr Ile Ile Gly Gln Lys Gly Glu Arg Ile Arg Glu Ile Arg Asp
 20 25 30
 Lys Phe Pro Glu Val Ile Ile Asn Phe Pro Asp Pro Ala Gln Lys Ser
 35 40 45
 Asp Ile Val Gln Leu Arg Gly Pro Lys Asn Glu Val Glu Lys Cys Thr
 50 55 60
 Lys Tyr Met Gln Lys Met Val Ala Asp Leu Val Glu Asn Ser Tyr Ser
 65 70 75 80
 Ile Ser Val Pro Ile Phe Lys Gln Phe His Lys Asn Ile Ile Gly Lys
 85 90 95
 Gly Gly Ala Asn Ile Lys Lys Ile Arg Glu Glu Ser Asn Thr Lys Ile
 100 105 110
 Asp Leu Pro Ala Glu Asn Ser Asn Ser Glu Thr Ile Ile Ile Thr Gly
 115 120 125
 Lys Arg Ala Asn Cys Glu Ala Ala Arg Ser Arg Ile Leu Ser Ile Gln
 130 135 140
 Lys Asp Leu Ala Asn Ile Ala Glu Val Glu Val Ser Ile Pro Ala Lys
 145 150 155 160
 Leu His Asn Ser Leu Ile Gly Thr Lys Gly Arg Leu Ile Arg Ser Ile
 165 170 175
 Met Glu Glu Cys Gly Gly Val His Ile His Phe Pro Val Glu Gly Ser
 180 185 190
 Gly Ser Asp Thr Val Val Ile Arg Gly Pro Ser Ser Asp Val Glu Lys
 195 200 205
 Ala Lys Lys Gln Leu Leu His Leu Ala Glu Glu Lys Gln Thr Lys Ser
 210 215 220
 Phe Thr Val Asp Ile Arg Ala Lys Pro Glu Tyr His Lys Phe Leu Ile
 225 230 235 240
 Gly Lys Gly Gly Gly Lys Ile Arg Lys Val Arg Asp Ser Thr Gly Ala
 245 250 255
 Arg Val Ile Phe Pro Ala Ala Glu Asp Lys Asp Gln Asp Leu Ile Thr
 260 265 270
 Ile Ile Gly Lys Glu Asp Ala Val Arg Glu Ala Gln Lys Glu Leu Glu
 275 280 285
 Ala Leu Ile Gln Asn Leu Asp Asn Val Val Glu Asp Ser Met Leu Val
 290 295 300

Asp Pro Lys His His Arg His Phe Val Ile Arg Arg Gly Gln Val Leu
 305 310 315 320
 Arg Glu Ile Ala Glu Glu Tyr Gly Gly Val Met Val Ser Phe Pro Arg
 325 330 335
 Ser Gly Thr Gln Ser Asp Lys Val Thr Leu Lys Gly Ala Lys Asp Cys
 340 345 350
 Val Glu Ala Ala Lys Lys Arg Ile Gln Glu Ile Ile Glu Asp Leu Glu
 355 360 365
 Ala Gln Val Thr Leu Glu Cys Ala Ile Pro Gln Lys Phe His Arg Ser
 370 375 380
 Val Met Gly Pro Lys Gly Ser Arg Ile Gln Gln Ile Thr Arg Asp Phe
 385 390 395 400
 Ser Val Gln Ile Lys Phe Pro Asp Arg Glu Glu Asn Ala Val His Ser
 405 410 415
 Thr Glu Pro Val Val Gln Glu Asn Gly Asp Glu Ala Gly Glu Gly Arg
 420 425 430
 Glu Ala Lys Asp Cys Asp Pro Gly Ser Pro Arg Arg Cys Asp Ile Ile
 435 440 445
 Ile Ile Ser Gly Arg Lys Glu Lys Cys Glu Ala Ala Lys Glu Ala Leu
 450 455 460
 Glu Ala Leu Val Pro Val Thr Ile Glu Val Glu Val Pro Phe Asn Leu
 465 470 475 480
 His Arg Tyr Val Ile Gly Gln Lys Gly Ser Gly Ile Arg Lys Met Met
 485 490 495
 Asp Glu Phe Glu Val Asp Pro Phe Pro Gly Arg Pro Cys His Arg Ser
 500 505 510
 Gly Leu Ser His Pro Leu Pro Ser Ala Ser Val Leu Ser Gln Leu Pro
 515 520 525
 Val Asp Ser Ala Ser Ser Cys Ser Asp Trp Ala Leu Thr Ser Leu His
 530 535 540
 Gly Gly Trp Pro Ser Leu Ser Pro Leu Leu Gly Pro Arg Ala Asn Gly
 545 550 555 560
 Leu Phe Pro Val Leu Trp Gly Pro Glu Arg Gln Val Ser Pro Leu Phe
 565 570 575
 Thr

<210> 4705

<211> 121

<212> PRT

<213> Homo sapiens

<400> 4705

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Met Val Ala Asp Leu Ile Asn Val Gln Ile Thr Ser Gly Gln Ala Gln
 1             5             10            15
Ser Ala Leu Phe Pro Pro Ser Pro Gln Leu Trp Leu Met Ser Ser Pro
      20             25            30
Phe Leu Pro Trp Pro Arg His Gly Glu Ser Ser Ile Gly Lys Ala Lys
      35             40            45
Val Ser Ser Arg Lys Thr Glu Gly Cys Ala Ser Pro Leu Glu Pro Leu
      50             55            60
Pro Ser Trp Pro Gly Leu Leu Pro Val Ser Val Lys Lys Lys Lys Lys
      65             70            75            80
Lys Lys Lys Ser Asp Met Gln Leu Leu Ser Thr Cys Cys Met Ser Ser
      85             90            95
Met Val Arg Asp Ala Glu Lys Tyr Lys Ala Val Ser Gly Gly Gln Val
      100            105            110
Glu Tyr Gln Leu His His Leu Lys Thr
      115            120

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<210> 4706

<211> 202

<212> PRT

<213> Homo sapiens

<400> 4706

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Met Arg Trp Gly Leu Val Pro Ser Trp Val Lys Glu Pro Lys Lys Phe
 1             5             10            15
Thr Leu Leu Ile Asn Ala Arg Ser Glu Thr Val Arg Asp Lys Pro Ala
      20             25            30

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Phe	Lys	Asn	Ala	Met	Lys	Arg	Arg	Arg	Val	Leu	Val	Pro	Ser	Asp	Gly
35				40				45							
Tyr	Tyr	Glu	Trp	Gln	Asp	Lys	Asp	Gly	Arg	Lys	Arg	Pro	Phe	Phe	Ile
50				55				60							
His	Arg	Arg	Asp	Gly	Gln	Pro	Thr	Gly	Phe	Ala	Ala	Leu	Ala	Glu	Thr
65				70				75				80			
Trp	Met	Gly	Pro	Asn	Gly	Glu	Glu	Phe	Asp	Ser	Val	Ala	Ile	Val	Thr
85				90				95							
Thr	Gln	Ala	Ser	Pro	Asp	Leu	Ala	Glu	Leu	His	His	Arg	Val	Pro	Val
100				105				110							
Thr	Ile	Ala	Pro	Asp	Asp	Phe	Glu	Arg	Trp	Leu	Asp	Gly	Arg	Ala	Asn
115				120				125							
Asp	Val	Glu	Asp	Val	Met	Pro	Leu	Leu	Arg	Ala	Pro	Arg	Val	Gly	Glu
130				135				140							
Phe	Ala	Trp	His	Glu	Val	Ser	Thr	Arg	Val	Asn	Arg	Val	Ala	Asn	Asp
145				150				155				160			
Asp	Glu	Gln	Leu	Val	Leu	Pro	Ile	Ser	Glu	Glu	Gln	Arg	Ala	Ala	Glu
165				170				175							
Ala	Pro	Lys	Pro	Val	Lys	Lys	Ala	Ala	Pro	Arg	Lys	Thr	Thr	Pro	Glu
180				185				190							
Pro	Glu	Asp	Glu	Gly	Gln	Gly	Ser	Leu	Phe						
195				200											

<210> 4707

<211> 339

<212> PRT

<213> Homo sapiens

<400> 4707

Met Leu Pro Ser Ala Val Ala Ala His Ala Gly Ala Tyr Trp Asp Val
1 5 10 15
Val Ala Ser Ser Ala Leu Leu Asn Leu Pro Ala Ala Pro Gly Phe Gly
20 25 30
Asn Leu Gly Lys Ser Phe Leu Ile Glu Asn Leu Leu Arg Val Gly Gly
35 40 45

Ala Pro Thr Pro Arg Leu Gln Pro Pro Ala Pro His Asp Pro Ala Thr
 50 55 60
 Ala Leu Ala Thr Ala Gly Ala Gln Leu Arg Pro Leu Pro Ala Ser Pro
 65 70 75 80
 Val Pro Leu Lys Leu Cys Pro Ala Ala Glu Gln Val Ser Pro Ala Gly
 85 90 95
 Ala Pro Tyr Gly Thr Arg Trp Ala Phe Gln Val Leu Ser Pro Ser Ala
 100 105 110
 Asp Ser Ala Arg Leu Pro Gly Arg Ala Pro Gly Asp Arg Asp Cys Thr
 115 120 125
 Phe Gln Pro Ser Ala Pro Ala Pro Ser Lys Pro Phe Leu Leu Ser Thr
 130 135 140
 Pro Pro Phe Tyr Ser Ala Cys Cys Gly Gly Ser Cys Arg Arg Pro Ala
 145 150 155 160
 Ser Ser Thr Ala Phe Pro Arg Glu Glu Ser Val Leu Pro Leu Leu Thr
 165 170 175
 Gln Asp Ser Asn Ser Lys Ala Arg Arg Gly Ile Leu Arg Arg Ala Val
 180 185 190
 Phe Ser Glu Asp Gln Arg Lys Ala Leu Glu Lys Met Phe Gln Lys Gln
 195 200 205
 Lys Tyr Ile Ser Lys Thr Asp Arg Lys Lys Leu Ala Ile Asn Leu Gly
 210 215 220
 Leu Lys Glu Ser Gln Val Lys Ile Trp Phe Gln Asn Arg Arg Met Lys
 225 230 235 240
 Trp Arg Asn Ser Lys Glu Lys Glu Val Leu Ser Asn Arg Cys Ile Gln
 245 250 255
 Glu Val Gly Leu Gln Glu Asp Pro Leu Ser Arg Ser Ala Leu Gly Phe
 260 265 270
 Pro Ser Pro Cys Pro Ser Ile Trp Asp Val Pro Gln Gln His Ser Ser
 275 280 285
 Pro Arg Trp Arg Glu Asn Ser Pro Glu Pro Ser Glu Arg Leu Ile Gln
 290 295 300
 Glu Ser Ser Gly Ala Pro Pro Pro Glu Ala Asn Ser Leu Gln Gly Ala
 305 310 315 320
 Leu Tyr Leu Cys Ser Glu Glu Glu Ala Gly Ser Lys Gly Val Leu Thr

Val Ile Leu Val Ala Phe Ser Glu Glu Gln Lys Tyr Tyr Gln Leu Ser
 195 200 205
 Glu Glu Gly Glu Ile Val Asp Leu Leu Leu Met Lys Ile Leu Ser Phe
 210 215 220
 Leu Gly Ile Lys Ser Lys Arg Glu Glu Pro Gly Ser Ser Arg Glu Gln
 225 230 235 240
 Pro Gly Ser Leu Ser Gln Thr Arg His Ser Arg Pro Ala Gln Ala Leu
 245 250 255
 Pro Lys Asp

<210> 4709

<211> 722

<212> PRT

<213> Homo sapiens

<400> 4709

Met Met Lys Glu Val Leu Ser Thr Gly Gln Gly Asn Thr Glu Val Ile
 1 5 10 15
 His Thr Gly Thr Leu Gln Arg Tyr Gln Ser Tyr His Ile Gly Asp Phe
 20 25 30
 Cys Phe Gln Glu Ile Glu Lys Glu Ile His Asp Ile Glu Phe Gln Cys
 35 40 45
 Gln Glu Asp Glu Arg Asn Gly His Glu Ala Pro Met Thr Lys Ile Lys
 50 55 60
 Lys Leu Thr Gly Ser Thr Asp Gln His Asp His Arg His Ala Gly Asn
 65 70 75 80
 Lys Pro Ile Lys Asp Gln Leu Gly Ser Ser Phe Tyr Ser His Leu Pro
 85 90 95
 Glu Leu His Ile Ile Gln Ile Lys Gly Lys Ile Gly Asn Gln Phe Glu
 100 105 110
 Lys Ser Thr Ser Asp Ala Pro Ser Val Ser Thr Ser Gln Arg Ile Ser
 115 120 125
 Pro Arg Pro Gln Ile His Ile Ser Asn Asn Tyr Gly Asn Asn Ser Pro

130	135	140	
Asn Ser Ser Leu Leu Pro Gln Lys Gln Glu Val Tyr Met Arg Glu Lys			
145	150	155	160
Ser Phe Gln Cys Asn Glu Ser Gly Lys Ala Phe Asn Cys Ser Ser Leu			
	165	170	175
Leu Arg Lys His Gln Ile Pro His Leu Gly Asp Lys Gln Tyr Lys Cys			
	180	185	190
Asp Val Cys Gly Lys Leu Phe Asn His Lys Gln Tyr Leu Thr Cys His			
	195	200	205
Arg Arg Cys His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly			
210	215	220	
Lys Ser Phe Ser Gln Val Ser Ser Leu Thr Cys His Arg Arg Leu His			
225	230	235	240
Thr Ala Val Lys Ser His Lys Cys Asn Glu Cys Gly Lys Ile Phe Gly			
	245	250	255
Gln Asn Ser Ala Leu Val Ile His Lys Ala Ile His Thr Gly Glu Lys			
	260	265	270
Pro Tyr Lys Cys Asn Glu Cys Asp Lys Ala Phe Asn Gln Gln Ser Asn			
	275	280	285
Leu Ala Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys			
290	295	300	
Glu Glu Cys Asp Lys Val Phe Ser Arg Lys Ser Thr Leu Glu Ser His			
305	310	315	320
Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp			
	325	330	335
Thr Ala Phe Thr Trp Asn Ser Gln Leu Ala Arg His Lys Arg Ile His			
	340	345	350
Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser			
	355	360	365
His Lys Ser Ser Leu Val Cys His His Arg Leu His Gly Gly Glu Lys			
370	375	380	
Ser Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala Trp Asn Ser His			
385	390	395	400
Leu Val Arg His Thr Arg Ile His Ser Gly Gly Lys Pro Tyr Lys Cys			
	405	410	415
Asn Glu Cys Gly Lys Thr Phe Gly Gln Asn Ser Asp Leu Leu Ile His			

	420		425		430
Lys Ser Ile His Thr Gly Glu Gln Pro Tyr Lys Tyr Glu Glu Cys Glu					
435		440		445	
Lys Val Phe Ser Cys Gly Ser Thr Leu Glu Thr His Lys Ile Ile His					
450		455		460	
Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala					
465		470		475	480
Cys His Ser Tyr Leu Ala Lys His Thr Arg Ile His Ser Gly Glu Lys					
	485		490		495
Pro Tyr Lys Cys Asn Glu Cys Ser Lys Thr Phe His Leu Arg Ser Tyr					
	500		505		510
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Lys Pro Tyr Lys Cys					
	515		520		525
Asn Glu Cys Ser Lys Thr Phe Ser Gln Arg Ser Tyr Leu His Cys His					
	530		535		540
Arg Arg Leu His Ser Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly					
545		550		555	560
Lys Thr Phe Ser His Lys Pro Ser Leu Val His His Arg Arg Leu His					
	565		570		575
Thr Gly Glu Lys Ser Tyr Lys Cys Thr Val Cys Asp Lys Ala Phe Val					
	580		585		590
Arg Asn Ser Tyr Leu Ala Arg His Thr Arg Ile His Thr Ala Glu Lys					
	595		600		605
Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn Gln Gln Ser Gln					
	610		615		620
Leu Ser Leu His His Arg Ile His Ala Gly Glu Lys Leu Tyr Lys Cys					
625		630		635	640
Glu Thr Cys Asp Lys Val Phe Ser Arg Lys Ser His Leu Lys Arg His					
	645		650		655
Arg Arg Ile His Pro Gly Lys Lys Pro Tyr Lys Cys Lys Val Cys Asp					
	660		665		670
Lys Thr Phe Gly Ser Asp Ser His Leu Lys Gln His Thr Gly Leu His					
	675		680		685
Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser					
	690		695		700
Lys Gln Ser Thr Leu Ile His His Gln Ala Val His Gly Val Gly Lys					

705 710 715 720
 Leu Asp

<210> 4710

<211> 422

<212> PRT

<213> Homo. sapiens

<400> 4710

Met Phe Gln Thr Ala Trp Arg Gln Glu Pro Val Thr Phe Glu Asp Val
 1 5 10 15
 Ala Val Tyr Phe Thr Gln Asn Glu Trp Ala Ser Leu Asp Ser Val Gln
 20 25 30
 Arg Ala Leu Tyr Arg Glu Val Met Leu Glu Asn Tyr Ala Asn Val Ala
 35 40 45
 Ser Leu Ala Phe Pro Phe Thr Thr Pro Val Leu Val Ser Gln Leu Glu
 50 55 60
 Gln Gly Glu Leu Pro Trp Gly Leu Asp Pro Trp Glu Pro Met Gly Arg
 65 70 75 80
 Glu Ala Leu Arg Gly Ile Cys Pro Gly Asp Glu Ala Arg Thr Glu Lys
 85 90 95
 Glu Gly Leu Thr Pro Lys Asp His Val Ser Lys Glu Thr Glu Ser Phe
 100 105 110
 Arg Leu Met Val Gly Gly Leu Pro Gly Asn Val Ser Gln His Leu Asp
 115 120 125
 Phe Gly Ser Ser Leu Glu Gln Pro Gln Gly His Trp Ile Ile Lys Thr
 130 135 140
 Lys Ser Lys Arg Arg His Phe Thr Asp Thr Ser Ala Arg His His Glu
 145 150 155 160
 Ala Tyr Glu Val Lys Asn Gly Glu Lys Phe Glu Lys Leu Gly Lys Asn
 165 170 175
 Ile Ser Val Ser Thr Gln Leu Thr Thr Asn Gln Thr Asn Pro Ser Gly
 180 185 190
 Gln Ile Ser Tyr Glu Cys Gly Gln Cys Gly Arg Tyr Phe Ile Gln Met

195	200	205
Ala Asp Phe His Arg His Glu Lys Cys His Thr Gly Glu Lys Ser Phe		
210	215	220
Glu Cys Lys Glu Cys Gly Lys Tyr Phe Arg Tyr Asn Ser Leu Leu Ile		
225	230	235
Arg His Gln Ile Ile His Thr Gly Lys Lys Pro Phe Lys Cys Lys Glu		
245	250	255
Cys Gly Lys Gly Leu Ser Ser Asp Thr Ala Leu Ile Gln His Gln Arg		
260	265	270
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala		
275	280	285
Phe Ser Ser Ser Ser Val Phe Leu Gln His Gln Arg Phe His Thr Gly		
290	295	300
Glu Lys Leu Tyr Glu Cys Asn Glu Cys Trp Lys Thr Phe Ser Cys Ser		
305	310	315
Ser Ser Phe Thr Val His Gln Arg Met His Thr Gly Glu Lys Pro Tyr		
325	330	335
Glu Cys Lys Glu Cys Gly Lys Arg Leu Ser Ser Asn Thr Ala Leu Thr		
340	345	350
Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu		
355	360	365
Cys Gly Lys Ala Phe Asn Gln Lys Ile Thr Leu Ile Gln His Gln Arg		
370	375	380
Val His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Val Cys Gly Lys Thr		
385	390	395
Phe Ser Trp Cys Gly Arg Phe Ile Leu His Gln Lys Leu His Thr Gln		
405	410	415
Lys Thr Pro Val Gln Ala		
420		

<210> 4711

<211> 446

<212> PRT

<213> Homo sapiens

<400> 4711

Met Glu Arg Ile Pro Val Ser Val Asp Phe Trp Val Val Cys Cys Ala
 1 5 10 15
 Val Leu Lys Cys Asn Pro Gly Ile Pro Lys Arg Met Ser Thr Leu Cys
 20 25 30
 Phe Gly Phe Ser Asp Glu Phe His Pro Phe Ile Glu Ala Leu Leu Pro
 35 40 45
 His Val Arg Ala Ile Ala Tyr Thr Trp Phe Asn Leu Gln Ala Gly Lys
 50 55 60
 Arg Lys Tyr Phe Lys Lys His Glu Lys Arg Met Ser Lys Asp Glu Glu
 65 70 75 80
 Arg Ala Val Lys Asp Glu Leu Leu Ser Glu Lys Pro Glu Ile Lys Gln
 85 90 95
 Lys Trp Ala Ser Arg Leu Leu Ala Lys Leu Arg Lys Asp Ile Arg Gln
 100 105 110
 Glu Tyr Arg Glu Asp Phe Val Leu Thr Val Thr Gly Lys Lys His Pro
 115 120 125
 Cys Cys Val Leu Ser Asn Pro Asp Gln Lys Gly Lys Ile Arg Arg Ile
 130 135 140
 Asp Cys Leu Arg Gln Ala Asp Lys Val Trp Arg Leu Asp Leu Val Met
 145 150 155 160
 Val Ile Leu Phe Lys Gly Ile Pro Leu Glu Ser Thr Asp Gly Glu Arg
 165 170 175
 Leu Met Lys Ser Pro His Cys Thr Asn Pro Ala Leu Cys Val Gln Pro
 180 185 190
 His His Ile Thr Val Ser Val Lys Glu Leu Asp Leu Phe Leu Ala Tyr
 195 200 205
 Tyr Val Gln Glu Gln Asp Ser Gly Gln Ser Gly Ser Pro Ser His Ser
 210 215 220
 Asp Pro Ala Lys Asn Pro Pro Gly Tyr Leu Glu Asp Ser Phe Val Lys
 225 230 235 240
 Ser Gly Val Phe Asn Val Ser Glu Leu Val Arg Val Ser Arg Thr Pro
 245 250 255
 Ile Thr Gln Gly Thr Gly Val Asn Phe Pro Ile Gly Glu Ile Pro Ser
 260 265 270
 Gln Pro Tyr Tyr His Asp Met Asn Ser Gly Val Asn Leu Gln Arg Ser

275 280 285
 Leu Ser Ser Pro Pro Ser Ser Lys Arg Pro Lys Thr Ile Ser Ile Asp
 290 295 300
 Glu Asn Met Glu Pro Ser Pro Thr Gly Asp Phe Tyr Pro Ser Pro Ser
 305 310 315 320
 Ser Pro Ala Ala Gly Ser Arg Thr Trp His Glu Arg Asp Gln Asp Met
 325 330 335
 Ser Ser Pro Thr Thr Met Lys Lys Pro Glu Lys Pro Leu Phe Ser Ser
 340 345 350
 Ala Ser Pro Gln Asp Ser Ser Pro Arg Leu Ser Thr Phe Pro Gln His
 355 360 365
 His His Pro Gly Ile Pro Gly Val Ala His Ser Val Ile Ser Thr Arg
 370 375 380
 Thr Pro Pro Pro Pro Ser Pro Leu Pro Phe Pro Thr Gln Ala Ile Leu
 385 390 395 400
 Pro Pro Ala Pro Ser Ser Tyr Phe Ser His Pro Thr Ile Arg Tyr Pro
 405 410 415
 Pro His Leu Asn Pro Gln Asp Thr Leu Lys Asn Tyr Val Pro Ser Tyr
 420 425 430
 Asp Pro Ser Ser Pro Gln Thr Ser Gln Ser Trp Tyr Leu Gly
 435 440 445

<210> 4712

<211> 488

<212> PRT

<213> Homo sapiens

<400> 4712

Met Arg Ile Ile Thr Ala Pro Ala Ser Lys Val Ser Arg Gly Ser Asn
 1 5 10 15
 Glu Leu Met Ile Leu Ala Arg Arg Ser Asp Arg Gly Ser Pro Thr Ser
 20 25 30
 Pro Ala His Ser Leu Ser Arg Lys Ser Pro Ile Met Tyr Pro Ser Thr
 35 40 45
 Thr Met Ala Asn Ala Pro Gly Leu Val Ser Cys Thr Phe Phe Leu Ala

50	55	60
Val Asn Gly Leu Tyr Ser Ser Ser Asp Asp Val Ile Glu Leu Thr Pro		
65	70	75
Ser Asn Phe Asn Arg Glu Val Ile Gln Ser Asp Ser Leu Trp Leu Val		
85	90	95
Glu Phe Tyr Ala Pro Trp Cys Gly His Cys Gln Arg Leu Thr Pro Glu		
100	105	110
Trp Lys Lys Ala Ala Thr Ala Leu Lys Asp Val Val Lys Val Gly Ala		
115	120	125
Val Asp Ala Asp Lys His His Ser Leu Gly Gly Gln Tyr Gly Val Gln		
130	135	140
Gly Phe Pro Thr Ile Lys Ile Phe Gly Ser Asn Lys Asn Arg Pro Glu		
145	150	155
Asp Tyr Gln Gly Gly Arg Thr Gly Glu Ala Ile Val Asp Ala Ala Leu		
165	170	175
Ser Ala Leu Arg Gln Leu Val Lys Asp Arg Leu Gly Gly Arg Ser Gly		
180	185	190
Gly Tyr Ser Ser Gly Lys Gln Gly Arg Ser Asp Ser Ser Ser Lys Lys		
195	200	205
Asp Val Ile Glu Leu Thr Asp Asp Ser Phe Asp Lys Asn Val Leu Asp		
210	215	220
Ser Glu Asp Val Trp Met Val Glu Phe Tyr Ala Pro Trp Cys Gly His		
225	230	235
Cys Lys Asn Leu Glu Pro Glu Trp Ala Ala Ala Ala Ser Glu Val Lys		
245	250	255
Glu Gln Thr Lys Gly Arg Val Lys Leu Ala Ala Val Asp Ala Thr Val		
260	265	270
Asn Gln Val Leu Ala Ser Arg Tyr Gly Ile Arg Gly Phe Pro Thr Ile		
275	280	285
Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp Gly Gly Arg		
290	295	300
Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe Ser Asp Asn		
305	310	315
Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp Ile Ala Lys		
325	330	335
Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val Leu Pro His		

340 345 350
 Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu Glu Val Leu
 355 360 365
 Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly Trp Leu Trp
 370 375 380
 Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu Gly Ile Gly
 385 390 395 400
 Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg Lys Met Lys
 405 410 415
 Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile Asn Glu Phe

 420 425 430
 Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro Val Gly Gly
 435 440 445
 Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp Gly Arg Asp
 450 455 460
 Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp Val Glu Leu
 465 470 475 480
 Asp Asp Leu Gly Lys Asp Glu Leu
 485

<210> 4713

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4713

Met Val Leu Ser Ser Gly Pro Gln Trp Cys Gly Ser Gln Glu Leu Trp
 1 5 10 15
 Phe Gly Lys Thr Cys Glu Glu Lys Ser Arg Leu Gly Arg Trp Pro Gly
 20 25 30
 Tyr Leu Asn Gly Gly Arg Met Glu Ser Ser Thr Asn Asp Ile Ile Glu
 35 40 45
 Val Ile Val Lys Asp Glu Met Ile Ser Val Glu Glu Ser Ser Gly Asn
 50 55 60

<211> 743

<212> PRT

<213> Homo sapiens

<400> 4714

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Met Ile Ser Gln Phe Phe Ile Leu Ser Ser Lys Gly Asp Pro Leu Ile
  1             5             10             15
Tyr Lys Asp Phe Arg Gly Asp Ser Gly Gly Arg Asp Val Ala Glu Leu
      20             25             30
Phe Tyr Arg Lys Leu Thr Gly Leu Pro Gly Asp Glu Ser Pro Val Val
      35             40             45
Met Asp Tyr Gly Tyr Val Gln Thr Thr Ser Thr Glu Met Leu Arg Asn
      50             55             60
Phe Ile Gln Thr Glu Ala Val Val Ser Lys Pro Phe Ser Leu Phe Asp
      65             70             75             80
Leu Ser Ser Val Gly Leu Phe Gly Ala Glu Thr Gln Gln Ser Lys Val
      85             90             95
Ala Pro Ser Ser Ala Ala Ser Arg Pro Val Leu Ser Ser Arg Ser Asp
      100            105            110
Gln Ser Gln Lys Asn Glu Val Phe Leu Asp Val Val Glu Arg Leu Ser
      115            120            125
Val Leu Ile Ala Ser Asn Gly Ser Leu Leu Lys Val Asp Val Gln Gly
      130            135            140
Glu Ile Arg Leu Lys Ser Phe Leu Pro Ser Gly Ser Glu Met Arg Ile
      145            150            155            160
Gly Leu Thr Glu Glu Phe Cys Val Gly Lys Ser Glu Leu Arg Gly Tyr
      165            170            175
Gly Pro Gly Ile Arg Val Asp Glu Val Ser Phe His Ser Ser Val Asn
      180            185            190
Leu Asp Glu Phe Glu Ser His Arg Ile Leu Arg Leu Gln Pro Pro Gln
      195            200            205
Gly Glu Leu Thr Val Met Arg Tyr Gln Leu Ser Asp Asp Leu Pro Ser
      210            215            220
Pro Leu Pro Phe Arg Leu Phe Pro Ser Val Gln Trp Asp Arg Gly Ser
      225            230            235            240
Gly Arg Leu Gln Val Tyr Leu Lys Leu Arg Cys Asp Leu Leu Ser Lys
      245            250            255

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Ser Gln Ala Leu Asn Val Arg Leu His Leu Pro Leu Pro Arg Gly Val
 260 265 270
 Val Ser Leu Ser Gln Glu Leu Ser Ser Pro Glu Gln Lys Ala Glu Leu
 275 280 285
 Ala Glu Gly Ala Leu Arg Trp Asp Leu Pro Arg Val Gln Gly Gly Ser
 290 295 300
 Gln Leu Ser Gly Leu Phe Gln Ser Arg Lys Gly Ala Asp Leu Asp Arg
 305 310 315 320
 Glu Lys Lys Ala Ala Glu Cys Lys Val Asp Ser Ile Gly Ser Gly Arg
 325 330 335
 Ala Ile Pro Ile Lys Gln Gly Ile Leu Leu Lys Arg Ser Gly Lys Ser
 340 345 350
 Leu Asn Lys Glu Trp Lys Lys Lys Tyr Val Thr Leu Cys Asp Asn Gly
 355 360 365
 Leu Leu Thr Tyr His Pro Ser Leu His Asp Tyr Met Gln Asn Ile His
 370 375 380
 Gly Lys Glu Ile Asp Leu Leu Arg Thr Thr Val Lys Val Pro Gly Lys
 385 390 395 400
 Arg Leu Pro Arg Ala Thr Pro Ala Thr Ala Pro Gly Thr Ser Pro Arg
 405 410 415
 Ala Asn Gly Leu Ser Val Glu Arg Ser Asn Thr Gln Leu Gly Gly Gly
 420 425 430
 Thr Glu Ala Glu Glu Ser Phe Glu Phe Val Val Val Ser Leu Thr Gly
 435 440 445
 Gln Thr Trp His Phe Glu Ala Ser Thr Ala Glu Glu Arg Glu Leu Trp
 450 455 460
 Val Gln Ser Val Gln Ala Gln Ile Leu Ala Ser Leu Gln Gly Cys Arg
 465 470 475 480
 Ser Ala Lys Asp Lys Thr Arg Leu Gly Asn Gln Asn Ala Ala Leu Ala
 485 490 495
 Val Gln Ala Val Arg Thr Val Arg Gly Asn Ser Phe Cys Ile Asp Cys
 500 505 510
 Asp Ala Pro Asn Pro Asp Trp Ala Ser Leu Asn Leu Gly Ala Leu Met
 515 520 525
 Cys Ile Glu Cys Ser Gly Ile His Arg His Leu Gly Ala His Leu Ser
 530 535 540

Arg Val Arg Ser Leu Asp Leu Asp Asp Trp Pro Pro Glu Leu Leu Ala
 545 550 555 560
 Val Met Thr Ala Met Gly Asn Ala Leu Ala Asn Ser Val Trp Glu Gly
 565 570 575
 Ala Leu Gly Gly Tyr Ser Lys Pro Gly Pro Asp Ala Cys Arg Glu Glu
 580 585 590
 Lys Glu Arg Trp Ile Arg Ala Lys Tyr Glu Gln Lys Leu Phe Leu Ala
 595 600 605
 Pro Leu Pro Ser Ser Asp Val Pro Leu Gly Gln Gln Leu Leu Arg Ala
 610 615 620
 Val Val Glu Asp Asp Leu Arg Leu Leu Val Met Leu Leu Ala His Gly
 625 630 635 640
 Ser Lys Glu Glu Val Asn Glu Thr Tyr Gly Asp Gly Asp Gly Arg Thr
 645 650 655
 Ala Leu His Leu Ser Ser Ala Met Ala Asn Val Val Phe Thr Gln Leu
 660 665 670
 Leu Ile Trp Tyr Gly Val Asp Val Arg Ser Arg Asp Ala Arg Gly Leu
 675 680 685
 Thr Pro Leu Ala Tyr Ala Arg Arg Ala Gly Ser Gln Glu Cys Ala Asp
 690 695 700
 Ile Leu Ile Gln His Gly Cys Pro Gly Glu Gly Cys Gly Leu Ala Pro
 705 710 715 720
 Thr Pro Asn Arg Glu Pro Ala Asn Gly Thr Asn Pro Ser Ala Glu Leu
 725 730 735
 His Arg Ser Pro Ser Leu Leu
 740

<210> 4715

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4715

Met Gln Ile Gln Glu Ile Gln Arg Thr Pro Leu Arg Tyr Ser Lys Arg
 1 5 10 15

Arg Ser Thr Pro Arg Pro Leu Ile Ile Gly Phe Ser Lys Val Glu Leu
 20 25 30
 Leu Arg Ala Ala Arg Glu Lys Gly Gln Val Thr Tyr Lys Gly Lys Pro
 35 40 45
 Ile Arg Pro Thr Ala Asp Phe Ser Ala Glu Pro Leu Gln Ala Arg Arg
 50 55 60
 Asp Cys Gly Pro Ile Ser Asn Ile Leu Lys Gly Lys Asn Phe Gln Pro
 65 70 75 80
 Arg Ile Ser Tyr Pro Ala Lys Leu Ile Ser Phe Ile Ser Glu Gly Glu
 85 90 95
 Ile Lys Ser Phe Pro Asp Lys Gln Met Leu Arg Asp Phe Val Thr Thr
 100 105 110
 Arg Pro Ala Leu Gln Glu Leu Leu Lys Glu Ala Leu Asn Met Glu Arg
 115 120 125
 Lys Asn Gln Tyr Gln Pro Leu Gln Lys His Thr Lys Ile
 130 135 140

<210> 4716

<211> 715

<212> PRT

<213> Homo sapiens

<400> 4716

Met Ala Thr Phe Met Asp Pro Gly Val Phe Pro Arg Ala Asp Glu Asp
 1 5 10 15
 Glu Asp Lys Glu Asp Asp Phe Arg Ala Pro Leu Tyr Lys Asn Val Asp
 20 25 30
 Val Arg Gly Ile Gln Val Arg Met Lys Trp Cys Ala Thr Cys His Phe
 35 40 45
 Tyr Arg Pro Pro Arg Cys Ser His Cys Ser Val Cys Asp Asn Cys Val
 50 55 60
 Glu Asp Phe Asp His His Cys Pro Trp Val Asn Asn Cys Ile Gly Arg
 65 70 75 80
 Arg Asn Tyr Arg Tyr Phe Phe Leu Phe Leu Leu Ser Leu Ser Ala His
 85 90 95

Met Val Gly Val Val Ala Phe Gly Leu Val Tyr Val Leu Asn His Ala
 100 105 110
 Glu Gly Leu Gly Ala Ala His Thr Thr Ile Thr Met Ala Val Met Cys
 115 120 125
 Val Ala Gly Leu Phe Phe Ile Pro Val Ile Gly Leu Thr Gly Phe His
 130 135 140
 Val Val Leu Val Thr Arg Gly Arg Thr Thr Asn Glu Gln Val Thr Gly
 145 150 155 160
 Lys Phe Arg Gly Gly Val Asn Pro Phe Thr Arg Gly Cys Cys Gly Asn
 165 170 175
 Val Glu His Val Leu Cys Ser Pro Leu Ala Pro Arg Tyr Val Val Glu
 180 185 190
 Pro Pro Arg Leu Pro Leu Ala Val Ser Leu Lys Pro Pro Phe Leu Arg
 195 200 205
 Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu Lys Val Lys Leu Ser Asp
 210 215 220
 Asn Gly Leu Lys Ala Gly Leu Gly Arg Ser Lys Ser Lys Gly Ser Leu
 225 230 235 240
 Asp Arg Leu Asp Glu Lys Pro Leu Asp Leu Gly Pro Pro Leu Pro Pro
 245 250 255
 Lys Ile Glu Ala Gly Thr Phe Ser Ser Asp Leu Gln Thr Pro Arg Pro
 260 265 270
 Gly Ser Ala Glu Ser Ala Leu Ser Val Gln Arg Thr Ser Pro Pro Thr
 275 280 285
 Pro Ala Met Tyr Lys Phe Arg Pro Ala Phe Pro Thr Gly Pro Lys Val
 290 295 300
 Pro Phe Cys Gly Pro Gly Glu Gln Val Pro Gly Pro Asp Ser Leu Thr
 305 310 315 320
 Leu Gly Asp Asp Ser Ile Arg Ser Leu Asp Phe Val Ser Glu Pro Ser
 325 330 335
 Leu Asp Leu Pro Asp Tyr Gly Pro Gly Gly Leu His Ala Ala Tyr Pro
 340 345 350
 Pro Ser Pro Pro Leu Ser Ala Ser Asp Ala Phe Ser Gly Ala Leu Arg
 355 360 365
 Ser Leu Ser Leu Lys Ala Ser Ser Arg Arg Gly Gly Asp His Val Ala
 370 375 380

Leu Gln Pro Leu Arg Ser Glu Gly Gly Pro Pro Thr Pro His Arg Ser
 385 390 395 400
 Ile Phe Ala Pro His Ala Leu Pro Asn Arg Asn Gly Ser Leu Ser Tyr
 405 410 415
 Asp Ser Leu Leu Asn Pro Gly Ser Pro Gly Gly His Ala Cys Pro Ala
 420 425 430
 His Pro Ala Val Gly Val Ala Gly Tyr His Ser Pro Tyr Leu His Pro
 435 440 445
 Gly Ala Thr Gly Asp Pro Pro Arg Pro Leu Pro Arg Ser Phe Ser Pro
 450 455 460
 Val Leu Gly Pro Arg Pro Arg Glu Pro Ser Pro Val Arg Tyr Asp Asn
 465 470 475 480
 Leu Ser Arg Thr Ile Met Ala Ser Ile Gln Glu Arg Lys Asp Arg Glu
 485 490 495
 Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala Asp Ser Leu Phe Gly Asp
 500 505 510
 Ser Gly Val Tyr Asp Ala Pro Ser Ser Tyr Ser Leu Gln Gln Ala Ser
 515 520 525
 Val Leu Ser Glu Gly Pro Arg Gly Pro Ala Leu Arg Tyr Gly Ser Arg
 530 535 540
 Asp Asp Leu Val Ala Gly Pro Gly Phe Gly Gly Ala Arg Asn Pro Ala
 545 550 555 560
 Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser Ser Val Ser Arg Ala Pro
 565 570 575
 Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp Gln Ala Ser Ser Asn Ala
 580 585 590
 Pro Gly Pro Arg Pro Ser Ser Gly Ser His Arg Ser Pro Ala Arg Gln
 595 600 605
 Gly Leu Pro Ser Pro Pro Gly Thr Pro His Ser Pro Ser Tyr Ala Gly
 610 615 620
 Pro Lys Ala Val Ala Phe Ile His Thr Asp Leu Pro Glu Pro Pro Pro
 625 630 635 640
 Ser Leu Thr Val Gln Arg Gly Arg Ile Gly Thr Cys Thr Arg Gly Trp
 645 650 655
 Gly Arg Arg Gly Gln Pro Trp Val Pro Pro Gly Leu His Leu Cys His
 660 665 670

<211> 851

<212> PRT

<213> Homo sapiens

<400> 4717

Met	Ser	Val	Ser	Phe	His	Thr	His	Thr	Lys	Glu	Leu	Trp	Thr	Trp	Met
1				5					10						15
Glu	Asp	Leu	Gln	Lys	Glu	Met	Leu	Glu	Asp	Val	Cys	Ala	Asp	Ser	Val
			20					25					30		
Asp	Ala	Val	Gln	Glu	Leu	Ile	Lys	Gln	Phe	Gln	Gln	Gln	Gln	Thr	Ala
			35				40					45			
Thr	Leu	Asp	Ala	Thr	Leu	Asn	Val	Ile	Lys	Glu	Gly	Glu	Asp	Leu	Ile
	50					55					60				
Gln	Gln	Leu	Arg	Asp	Ser	Ala	Val	Ser	Asn	Asn	Lys	Thr	Pro	His	Ser
65				70					75					80	
Ser	Ser	Ile	Ser	His	Ile	Glu	Ser	Val	Leu	Gln	Gln	Leu	Asp	Asp	Ala
			85					90					95		
Gln	Val	Gln	Met	Glu	Glu	Leu	Phe	His	Glu	Arg	Lys	Ile	Lys	Leu	Asp
		100				105					110				
Ile	Phe	Leu	Gln	Leu	Arg	Ile	Phe	Glu	Gln	Tyr	Thr	Ile	Glu	Val	Thr
	115					120					125				
Ala	Glu	Leu	Asp	Ala	Trp	Asn	Glu	Asp	Leu	Leu	Arg	Gln	Met	Asn	Asp
	130					135					140				
Phe	Asn	Thr	Glu	Asp	Leu	Thr	Leu	Ala	Glu	Gln	Arg	Leu	Gln	Arg	His
145				150					155					160	
Thr	Glu	Arg	Lys	Leu	Ala	Met	Asn	Asn	Met	Thr	Phe	Glu	Val	Ile	Gln
			165					170					175		

Gln Gly Gln Asp Leu His Gln Tyr Ile Thr Glu Val Gln Ala Ser Gly
 180 185 190
 Ile Glu Leu Ile Cys Glu Lys Asp Ile Asp Leu Ala Ala Gln Val Gln
 195 200 205
 Glu Leu Leu Glu Phe Leu His Glu Lys Gln His Glu Leu Glu Leu Asn
 210 215 220
 Ala Glu Gln Thr His Lys Arg Leu Glu Gln Cys Leu Gln Leu Arg His
 225 230 235 240
 Leu Gln Ala Glu Val Lys Gln Val Leu Gly Trp Ile Arg Asn Gly Glu
 245 250 255
 Ser Met Leu Asn Ala Ser Leu Val Asn Ala Ser Ser Leu Ser Glu Ala
 260 265 270
 Glu Gln Leu Gln Arg Glu His Glu Gln Phe Gln Leu Ala Ile Glu Ser
 275 280 285
 Leu Phe His Ala Thr Ser Leu Gln Lys Thr His Gln Ser Ala Leu Gln
 290 295 300
 Val Gln Gln Lys Ala Glu Val Leu Leu Gln Ala Gly His Tyr Asp Ala
 305 310 315 320
 Asp Ala Ile Arg Glu Cys Ala Glu Lys Val Ala Leu His Trp Gln Gln
 325 330 335
 Leu Met Leu Lys Met Glu Asp Arg Leu Lys Leu Val Asn Ala Ser Val
 340 345 350
 Ala Phe Tyr Lys Thr Ser Glu Gln Val Cys Ser Val Leu Glu Ser Leu
 355 360 365
 Glu Gln Glu Tyr Arg Arg Asp Glu Asp Trp Cys Gly Gly Arg Asp Lys
 370 375 380
 Leu Gly Pro Ala Ala Glu Ile Asp His Val Ile Pro Leu Ile Ser Lys
 385 390 395 400
 His Leu Glu Gln Lys Glu Ala Phe Leu Lys Ala Cys Thr Leu Ala Arg
 405 410 415
 Arg Asn Ala Glu Val Phe Leu Lys Tyr Ile His Arg Asn Asn Val Ser
 420 425 430
 Met Pro Ser Val Ala Ser His Thr Arg Gly Pro Glu Gln Gln Val Lys
 435 440 445
 Ala Ile Leu Ser Glu Leu Leu Gln Arg Glu Asn Arg Val Leu His Phe
 450 455 460

Trp Thr Leu Lys Lys Arg Arg Leu Asp Gln Cys Gln Gln Tyr Val Val
 465 470 475 480
 Phe Glu Arg Ser Ala Lys Gln Ala Leu Asp Trp Ile Gln Glu Thr Gly
 485 490 495
 Glu Phe Tyr Leu Ser Thr His Thr Ser Thr Gly Glu Thr Thr Glu Glu
 500 505 510
 Thr Gln Glu Leu Leu Lys Glu Tyr Gly Glu Phe Arg Val Pro Ala Lys
 515 520 525
 Gln Thr Lys Glu Lys Val Lys Leu Leu Ile Gln Leu Ala Asp Ser Phe
 530 535 540
 Val Glu Lys Gly His Ile His Ala Thr Glu Ile Arg Lys Trp Val Thr
 545 550 555 560
 Thr Val Asp Lys His Tyr Arg Asp Phe Ser Leu Arg Met Gly Lys Tyr
 565 570 575
 Arg Tyr Ser Leu Glu Lys Ala Leu Gly Val Asn Thr Glu Asp Asn Lys
 580 585 590
 Asp Leu Glu Leu Asp Ile Ile Pro Ala Ser Leu Ser Asp Arg Glu Val
 595 600 605
 Lys Leu Arg Asp Ala Asn His Glu Val Asn Glu Glu Lys Arg Lys Ser
 610 615 620
 Ala Arg Lys Lys Glu Phe Ile Met Ala Glu Leu Leu Gln Thr Glu Lys
 625 630 635 640
 Ala Tyr Val Arg Asp Leu His Glu Cys Leu Glu Thr Tyr Leu Trp Glu
 645 650 655
 Met Thr Ser Gly Val Glu Glu Ile Pro Pro Gly Ile Leu Asn Lys Glu
 660 665 670
 His Ile Ile Phe Gly Asn Ile Gln Glu Ile Tyr Asp Phe His Asn Asn
 675 680 685
 Ile Phe Leu Lys Glu Leu Glu Lys Tyr Glu Gln Leu Pro Glu Asp Val
 690 695 700
 Gly His Cys Phe Val Thr Trp Ala Asp Lys Phe Gln Met Tyr Val Thr
 705 710 715 720
 Tyr Cys Lys Asn Lys Pro Asp Ser Asn Gln Leu Ile Leu Glu His Ala
 725 730 735
 Gly Thr Phe Phe Asp Glu Ile Gln Gln Arg His Gly Leu Ala Asn Ser
 740 745 750

<211> 312

<213> Homo sapiens

Met	Ile	Ala	Val	Gly	Ser	Met	Asp	Tyr	Gly	Leu	Trp	Gln	Leu	Phe	Cys
1				5					10					15	
Thr	Leu	Glu	Leu	Pro	Leu	Ile	Pro	Ile	Leu	Ala	Val	Met	Glu	Ser	His
				20					25					30	
Ala	Ile	Gln	Val	Asn	Lys	Glu	Glu	Met	Glu	Lys	Thr	Ser	Ala	Leu	Leu
				35					40					45	
Gly	Ala	Arg	Leu	Lys	Glu	Leu	Glu	Gln	Glu	Ala	His	Phe	Val	Ala	Gly
				50					55					60	
Glu	Arg	Phe	Leu	Ile	Thr	Ser	Asn	Asn	Gln	Leu	Arg	Glu	Ile	Leu	Phe
65					70						75				80
Gly	Lys	Leu	Lys	Leu	His	Leu	Leu	Ser	Gln	Arg	Asn	Ser	Leu	Pro	Arg
					85						90				95
Thr	Gly	Leu	Gln	Lys	Tyr	Pro	Ser	Thr	Ser	Glu	Ala	Val	Asn	Ile	Gln
				100					105					110	

Gly	Ile	Ser	Lys	His	Pro	Ile	Gln	Ile	Thr	Thr	Pro	Lys	Asn	Phe	Lys	
115					120					125						
Gly	Lys	Glu	Asp	Lys	Ile	Leu	Thr	Ile	Ser	Pro	Arg	Ala	Met	Phe	Val	
130					135					140						
Ser	Ser	Lys	Gly	His	Thr	Phe	Leu	Ala	Ala	Asp	Phe	Ser	Gln	Ile	Glu	
145					150					155					160	
Leu	Arg	Ile	Leu	Thr	His	Leu	Ser	Gly	Asp	Pro	Glu	Leu	Leu	Lys	Leu	
165					170					175						
Phe	Gln	Glu	Ser	Glu	Arg	Asp	Asp	Val	Phe	Ser	Thr	Leu	Thr	Ser	Gln	
180					185					190						
Trp	Lys	Asp	Val	Pro	Val	Glu	Gln	Val	Thr	His	Ala	Asp	Arg	Glu	Gln	
195					200					205						
Thr	Lys	Lys	Val	Val	Tyr	Ala	Val	Val	Tyr	Gly	Ala	Gly	Lys	Glu	Arg	
210					215					220						
Leu	Ala	Ala	Cys	Leu	Gly	Val	Pro	Ile	Gln	Glu	Ala	Ala	Gln	Phe	Leu	
225					230					235					240	
Glu	Ser	Phe	Leu	Gln	Lys	Tyr	Lys	Lys	Ile	Lys	Asp	Phe	Ala	Arg	Ala	
245					250					255						
Ala	Ile	Ala	Gln	Cys	His	Gln	Thr	Gly	Cys	Val	Val	Ser	Ile	Met	Gly	
260					265					270						
Arg	Arg	Arg	Pro	Leu	Pro	Arg	Ile	His	Ala	His	Asp	Gln	Gln	Leu	Arg	
275					280					285						
Ala	Gln	Ala	Glu	Arg	Gln	Ala	Val	Asn	Phe	Val	Val	Gln	Ala	Gln	Ser	
290					295					300						
Gln	His	Leu	Cys	Val	Glu	Val	Pro									
305					310											

<210> 4719

 $\langle 211 \rangle$ 123

<212> PRT

<213> Homo sapiens

<400> 4719

Met Pro Gly Pro Pro Gly Ser Leu Glu Met Gly Pro Leu Thr Phe Arg
1 5 10 15

Asp Val Ala Ile Glu Phe Ser Leu Glu Glu Trp Gln Cys Leu Asp Thr
 20 25 30
 Ala Gln Arg Asn Leu Tyr Arg Lys Val Met Phe Glu Asn Tyr Arg Asn
 35 40 45
 Leu Val Phe Leu Gly Ile Ala Val Ser Lys Pro His Leu Ile Thr Cys
 50 55 60
 Leu Glu Gln Gly Lys Glu Pro Trp Asn Arg Lys Arg Gln Glu Met Val
 65 70 75 80
 Ala Lys Pro Pro Glu Ser Tyr Cys Val Ala Gln Ala Asp Leu Glu Leu
 85 90 95
 Leu Val Ser Ser Tyr Leu Thr Ala Leu Ala Ser Leu Lys Met Trp Asp
 100 105 110
 Tyr Arg Asn Asn Pro Leu Cys Gln Ala Thr Met
 115 120

<210> 4720

<211> 301

<212> PRT

<213> Homo sapiens

<400> 4720

Met Ala Val Arg Pro Gly Leu Trp Pro Ala Leu Leu Gly Ile Val Leu
 1 5 10 15
 Ala Ala Trp Leu Arg Gly Ser Gly Ala Gln Gln Ser Ala Thr Val Ala
 20 25 30
 Asn Pro Val Pro Gly Ala Asn Pro Asp Leu Leu Pro His Phe Leu Val
 35 40 45
 Glu Pro Glu Asp Val Tyr Ile Val Lys Asn Lys Pro Val Leu Leu Val
 50 55 60
 Cys Lys Ala Val Pro Ala Thr Gln Ile Phe Phe Lys Cys Asn Gly Glu
 65 70 75 80
 Trp Val Arg Gln Val Asp His Val Ile Glu Arg Ser Thr Asp Gly Ser
 85 90 95
 Asn Gly Leu Pro Thr Met Glu Val Arg Ile Asn Val Ser Arg Gln Gln
 100 105 110

Val	Glu	Lys	Val	Phe	Gly	Leu	Glu	Glu	Tyr	Trp	Cys	Gln	Cys	Val	Ala
115				120				125							
Trp	Ser	Ser	Ser	Gly	Thr	Thr	Lys	Ser	Gln	Lys	Ala	Tyr	Ile	Arg	Ile
130				135				140							
Ala	Tyr	Leu	Arg	Lys	Asn	Phe	Glu	Gln	Glu	Pro	Leu	Ala	Lys	Glu	Val
145				150				155				160			
Ser	Leu	Glu	Gln	Gly	Ile	Val	Leu	Pro	Cys	Arg	Pro	Pro	Glu	Gly	Ile
165				170				175							
Pro	Pro	Ala	Glu	Val	Glu	Trp	Leu	Arg	Asn	Glu	Asp	Leu	Val	Asp	Pro
180				185				190							
Ser	Leu	Asp	Pro	Asn	Val	Tyr	Ile	Thr	Arg	Glu	His	Ser	Leu	Val	Val
195				200				205							
Arg	Gln	Ala	Arg	Leu	Ala	Asp	Thr	Ala	Asn	Tyr	Thr	Cys	Val	Ala	Lys
210				215				220							
Asn	Ile	Val	Ala	Arg	Arg	Arg	Ser	Ala	Ser	Ala	Ala	Val	Ile	Val	Tyr
225				230				235				240			
Val	Asp	Gly	Ser	Trp	Ser	Pro	Trp	Ser	Lys	Trp	Ser	Ala	Cys	Gly	Leu
245				250				255							
Asp	Cys	Thr	His	Trp	Arg	Ser	Arg	Glu	Cys	Ser	Asp	Pro	Ala	Pro	Arg
260				265				270							
Asn	Gly	Gly	Glu	Glu	Cys	Gln	Gly	Thr	Asp	Leu	Asp	Thr	Arg	Asn	Cys
275				280				285							
Thr	Ser	Asp	Leu	Cys	Val	His	Ser	Glu	Ser	Ser	Leu	Pro			
290				295				300							

<210> 4721

<211> 101

<212> PRT

<213> Homo sapiens

<400> 4721

Met Leu Arg Glu Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys
1 5 10 15
Pro Leu Cys Thr Glu Ala Ala Val Arg Asp Val Thr Asn Leu Asn Leu
20 25 30

Pro Glu Ser Trp Arg Phe Thr Phe Cys Lys Gly Arg Gly His Ser Trp
 35 40 45
 Thr Val Thr Ile Pro Ile Leu Val Arg Val Ala Gly Thr Glu Gln Ser
 50 55 60
 His Gln His Ala Lys Val His Leu Gln Ser Ser Met His Ala Pro Arg
 65 70 75 80
 Lys Pro Pro Val Gly Tyr Ala Ser Cys Thr Phe Pro Phe Ser Leu Thr
 85 90 95
 Ser Val Ser Cys Leu
 100

<210> 4722

<211> 116

<212> PRT

<213> Homo sapiens

<400> 4722

Met Thr Phe Arg Ser Gly Gly Gly Asp Ala Leu Gly Lys Ala Ala Cys
 1 5 10 15
 Leu Val Pro Ala Ala Ser Arg Pro Gln Ser Pro Ile Leu Gln Met Thr
 20 25 30
 Ser Arg Glu Val Thr Pro Gln Val Gly Asn Arg Ala Gly Phe Gly Ile
 35 40 45
 Arg Val Cys Leu Phe Pro Pro Arg Asp Pro Glu Ser Trp Gln Pro Val
 50 55 60
 Ser Lys Leu Leu Tyr Val His His Thr Ser Gly Phe Arg Phe Ile Gly
 65 70 75 80
 Val Phe Leu Lys Leu Arg Leu Val Ser Val Gln Leu Leu Leu Val Arg
 85 90 95
 His Leu Ser Tyr Thr Arg His Cys Pro Trp Cys Trp Arg His Ser Asn
 100 105 110
 Glu Glu Asp Arg
 115

<210> 4723

<211> 166

<212> PRT

<213> Homo sapiens

<400> 4723

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Met Arg His Thr Ser Lys Arg Lys Pro Gln Tyr Tyr Glu Ala Glu Met
  1             5             10             15
Val Leu Lys Tyr Tyr Lys His Leu Glu Glu Gly Ser Val Ser Leu Cys
             20             25             30
Cys Pro Gly Trp Ser Ala Val Ala Gln Ser Arg Leu Thr Ala Ala Ser
             35             40             45
Thr Phe Gly Ala Gln Val Ile Leu Leu Phe Gln Leu Ser Glu Gln Leu
             50             55             60
Arg Leu Gln Glu Leu Lys Leu Pro Thr Phe Arg Ala His Ser Pro Leu
             65             70             75             80
Leu Lys Ser Arg Arg Phe Phe Val Asp Ile Leu Thr Leu Leu Ser Ser
             85             90             95
His Cys Gln Leu Cys Pro Ala Ala Arg His Leu Ala Val Tyr Leu Leu
             100            105            110
Asp His Phe Met Asp Arg Tyr Asn Val Thr Thr Ser Lys Gln Leu Tyr
             115            120            125
Thr Val Ala Val Ser Cys Leu Leu Leu Ala Ser Arg Asn Lys Gly Ser
             130            135            140
Gly Ser Pro Val Pro Thr Arg Ser Ala Gln Gln Cys Arg Gln Thr Trp
             145            150            155            160
Ala Arg Gly Ser Pro Trp
             165

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<210> 4724

<211> 165

<212> PRT

<213> Homo sapiens

<400> 4724

Met Leu Phe Phe Asn Lys Lys Asn Phe Phe Asn His Gly Leu Ser Gly
 1 5 10 15
 Phe Ser Cys Pro Leu Asp Thr Phe Leu Cys Leu Ser Leu Ser Leu Phe
 20 25 30
 Pro Ala Leu His Arg Gly Pro Pro Gly Ser Arg Gly Pro Leu Ile Pro
 35 40 45
 Pro Leu Leu Ser Leu Pro Pro Pro Pro Trp Gly Arg Gly Pro Ile Arg
 50 55 60
 Arg Gly Leu Gly Pro Arg Ser Ser Pro Tyr Gly Arg Gly Trp Trp Gly
 65 70 75 80
 Val Asn Ala Glu Pro Pro Phe Pro Gly Pro Gly His Gly Gly Pro Thr
 85 90 95
 Arg Gly Ser Phe His Lys Glu Gln Arg Asn Pro Arg Arg Leu Lys Ser
 100 105 110
 Trp Ser Leu Ile Lys Asn Thr Cys Pro Pro Lys Asp Asp Pro Gln Val
 115 120 125
 Met Glu Asp Lys Ser Asp Arg Pro Val Cys Arg His Phe Ala Lys Lys
 130 135 140
 Gly His Cys Arg Tyr Glu Asp Leu Cys Ala Phe Tyr His Pro Gly Val
 145 150 155 160
 Asn Gly Pro Pro Leu
 165

<210> 4725

<211> 141

<212> PRT

<213> Homo sapiens

<400> 4725

Met Arg Asp Asn Ile Ile Ile Ser Gly Ser Thr Asp Arg Thr Leu Lys
 1 5 10 15
 Val Trp Asn Ala Glu Thr Gly Glu Cys Ile His Thr Leu Tyr Gly His
 20 25 30
 Thr Ser Thr Val Arg Cys Met His Leu His Glu Lys Arg Val Val Ser
 35 40 45

Gly	Ser	Arg	Asp	Ala	Thr	Leu	Arg	Val	Trp	Asp	Ile	Glu	Thr	Gly	Gln
50						55					60				
Cys	Leu	His	Val	Leu	Met	Gly	His	Val	Ala	Ala	Val	Arg	Cys	Val	Gln
65					70					75					80
Tyr	Asp	Gly	Arg	Arg	Val	Val	Ser	Gly	Ala	Tyr	Asp	Phe	Met	Val	Lys
				85					90					95	
Ala	Trp	Asp	Pro	Glu	Thr	Glu	Thr	Cys	Leu	His	Thr	Leu	Gln	Gly	His
			100					105					110		
Thr	Asn	Arg	Val	Tyr	Ser	Leu	Gln	Val	Arg	Ser	Leu	Ile	Ser	Pro	Leu
		115					120					125			
Asn	Ala	Leu	Leu	Met	Asn	His	Lys	Val	Val	Leu	Leu	Arg			
130						135					140				

<210> 4726

<211> 326

<212> PRT

<213> Homo sapiens

<400> 4726

Met	Asp	Ala	Ile	Lys	Lys	Lys	Met	Gln	Met	Leu	Lys	Leu	Asp	Lys	Glu
1				5					10					15	
Asn	Ala	Leu	Asp	Arg	Ala	Glu	Gln	Ala	Glu	Ala	Asp	Lys	Lys	Ala	Ala
				20					25					30	
Glu	Asp	Arg	Ser	Lys	Gln	Leu	Glu	Glu	Asp	Ile	Ala	Ala	Lys	Glu	Lys
				35				40					45		
Leu	Leu	Arg	Val	Ser	Glu	Asp	Glu	Arg	Asp	Arg	Val	Leu	Glu	Glu	Leu
				50			55				60				
His	Lys	Ala	Glu	Asp	Ser	Leu	Leu	Ala	Ala	Glu	Glu	Ala	Ala	Ala	Lys
65					70					75					80
Leu	Glu	Asp	Glu	Leu	Val	Ser	Leu	Gln	Lys	Lys	Leu	Lys	Gly	Thr	Glu
				85					90					95	
Asp	Glu	Leu	Asp	Lys	Tyr	Ser	Glu	Ala	Leu	Lys	Asp	Ala	Gln	Glu	Lys
				100					105					110	
Leu	Glu	Leu	Ala	Glu	Lys	Lys	Ala	Thr	Asp	Ala	Glu	Ala	Asp	Val	Ala
				115			120						125		

Ser Leu Asn Arg Arg Ile Gln Leu Val Glu Glu Glu Leu Asp Arg Ala
 130 135 140
 Gln Glu Arg Leu Ala Thr Ala Leu Gln Lys Leu Glu Glu Ala Glu Lys
 145 150 155 160
 Ala Ala Asp Glu Ser Glu Arg Gly Met Lys Val Ile Glu Ser Arg Ala
 165 170 175
 Gln Lys Asp Glu Glu Lys Met Glu Ile Gln Glu Ile Gln Leu Lys Glu
 180 185 190
 Ala Lys His Ile Ala Glu Asp Ala Asp Arg Lys Tyr Glu Glu Val Ala
 195 200 205
 Arg Lys Leu Val Ile Ile Glu Ser Asp Leu Glu Arg Ala Glu Glu Arg
 210 215 220
 Ala Glu Leu Ser Glu Gly Lys Cys Ala Glu Leu Glu Glu Glu Leu Lys
 225 230 235 240
 Thr Val Thr Asn Asn Leu Lys Ser Leu Glu Ala Gln Ala Glu Lys Tyr
 245 250 255
 Ser Gln Lys Glu Asp Arg Tyr Glu Glu Glu Ile Lys Val Leu Ser Asp
 260 265 270
 Lys Leu Lys Glu Ala Glu Thr Arg Ala Glu Phe Ala Glu Arg Ser Val
 275 280 285
 Thr Lys Leu Glu Lys Ser Ile Asp Asp Leu Glu Glu Lys Val Ala His
 290 295 300
 Ala Lys Glu Glu Asn Leu Ser Met His Gln Met Leu Asp Gln Thr Leu
 305 310 315 320
 Leu Glu Leu Asn Asn Met
 325

<210> 4727

<211> 268

<212> PRT

<213> Homo sapiens

<400> 4727

Met Ala Ala Ala Thr Gly Ala Val Ala Ala Ser Ala Ala Ser Gly Gln

1	5	10	15
Ala Glu Gly Lys Lys Ile Thr Asp Leu Arg Val Ile Asp Leu Lys Ser			
20	25	30	
Glu Leu Lys Arg Arg Asn Leu Asp Ile Thr Gly Val Lys Thr Val Leu			
35	40	45	
Ile Ser Arg Leu Lys Gln Ala Ile Glu Glu Glu Gly Gly Asp Pro Asp			
50	55	60	
Asn Ile Glu Leu Thr Val Ser Thr Gly Thr Pro Asn Lys Lys Pro Thr			
65	70	75	80
Lys Gly Lys Gly Lys Lys His Glu Ala Asp Glu Leu Ser Gly Asp Ala			
85	90	95	
Ser Val Glu Asp Asp Ala Phe Ile Lys Asp Gly Glu Glu Glu Glu Asn			
100	105	110	
Glu Lys Gly Ser Leu Ala Glu Ala Asp His Thr Ala His Glu Glu Met			
115	120	125	
Glu Ala His Thr Thr Val Lys Glu Ala Glu Asp Asp Asn Ile Ser Val			
130	135	140	
Thr Ile Gln Ala Glu Asp Ala Ile Thr Leu Asp Phe Asp Gly Asp Asp			
145	150	155	160
Leu Leu Glu Thr Gly Lys Asn Val Lys Ile Thr Asp Ser Glu Ala Ser			
165	170	175	
Lys Pro Lys Asp Gly Gln Asp Ala Ile Ala Gln Ser Pro Glu Lys Glu			
180	185	190	
Ser Lys Asp Tyr Glu Met Asn Ala Asn His Lys Asp Gly Lys Lys Glu			
195	200	205	
Asp Cys Val Lys Gly Asp Pro Val Glu Lys Glu Ala Arg Glu Ser Ser			
210	215	220	
Lys Lys Ala Glu Ser Gly Asp Lys Glu Lys Asp Thr Leu Lys Lys Gly			
225	230	235	240
Pro Ser Ser Thr Gly Ala Ser Gly Gln Ala Lys Arg Phe Val Phe Leu			
245	250	255	
Cys Gln Phe Phe Thr Ile Leu Asn Ser Ser Ile Gln			
260	265		

<210> 4728

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4728

```

Met Thr Thr His Leu Tyr Asp Ala Pro Thr Val Lys Phe Leu Thr Pro
  1             5             10             15
Cys Tyr His Pro Asn Val Asp Thr Gln Gly Asn Ile Cys Leu Asp Ile
          20             25             30
Leu Lys Glu Lys Trp Ser Ala Pro Tyr Asp Ile Arg Thr Ile Leu Leu
      35             40             45
Ser Ile Gln Cys Leu Leu Gly Gln Leu Asn Ile Asp Ser Pro Leu Asn
      50             55             60
Thr His Ala Thr Lys Leu Trp Glu Asn Pro Ile Ala Leu Arg Ser Thr
      65             70             75             80
Cys Lys Gly Gln Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp
          85             90             95
Glu Ala Glu Val Gly Gly Trp Ile Thr
          100             105

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<210> 4729

<211> 336

<212> PRT

<213> Homo sapiens

<400> 4729

```

Met Lys Glu Arg Lys Arg His Leu Gly Asp Thr Lys His Phe Cys Pro
  1             5             10             15
Val Val Leu Lys Glu Asn Phe Ile Leu Gln Pro Gly Asn Thr Glu Glu
          20             25             30
Ala Ala Lys Tyr Arg Glu Lys Ile Tyr Tyr Phe Ser Ser Ala Glu Ala
      35             40             45
Lys Glu Lys Phe Leu Glu His Pro Glu Asp Tyr Val Ala His Glu Glu
      50             55             60

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Pro Leu Lys Ala Pro Pro Leu Arg Ile Cys Leu Val Gly Pro Gln Gly
 65 70 75 80
 Ser Gly Lys Thr Met Cys Gly Arg Gln Leu Ala Glu Lys Leu Asn Ile
 85 90 95
 Phe His Ile Gln Phe Glu Glu Val Leu Gln Glu Lys Leu Leu Leu Lys
 100 105 110
 Thr Glu Lys Lys Val Gly Pro Glu Phe Glu Glu Asp Ser Glu Asn Glu
 115 120 125
 Gln Ala Ala Lys Gln Glu Leu Glu Glu Leu Ala Ile Gln Ala Asn Val
 130 135 140
 Lys Val Glu Glu Glu Asn Thr Lys Lys Gln Leu Pro Glu Val Gln Leu
 145 150 155 160
 Thr Glu Glu Glu Glu Val Ile Lys Ser Ser Leu Met Glu Asn Glu Pro
 165 170 175
 Leu Pro Pro Glu Ile Leu Glu Val Ile Leu Ser Glu Trp Trp Leu Lys
 180 185 190
 Glu Pro Ile Arg Ser Thr Gly Phe Ile Leu Asp Gly Phe Pro Arg Tyr
 195 200 205
 Pro Glu Glu Ala Gln Phe Leu Gly Asp Arg Gly Phe Phe Pro Asp Ala
 210 215 220
 Ala Val Phe Ile Gln Val Asp Asp Gln Asp Ile Phe Asp Arg Leu Leu
 225 230 235 240
 Pro Ala Gln Ile Glu Lys Trp Lys Leu Lys Gln Lys Lys Lys Leu Glu
 245 250 255
 Arg Lys Lys Leu Ile Lys Asp Met Lys Ala Lys Ile Arg Val Asp Thr
 260 265 270
 Ile Ala Lys Arg Arg Ala Glu Leu Ile Leu Glu Arg Asp Lys Lys Arg
 275 280 285
 Arg Glu Val Ser Ser Phe Val Phe Phe Phe Lys Thr Gly Ser His Ser
 290 295 300
 Val Ala Gln Gly Arg Val Gln Trp His Asn His Ser Ser Leu Gln Pro
 305 310 315 320
 Arg Thr Pro Gly Leu Lys Gly Ser Ser His Leu Ser Leu Ser Lys Cys
 325 330 335

<210> 4730

<211> 438

<212> PRT

<213> Homo sapiens

<400> 4730

```

Met His Pro Leu Pro Gly Tyr Trp Ser Cys Tyr Cys Leu Leu Leu Leu
  1             5             10             15
Phe Ser Leu Gly Val Gln Gly Ser Leu Gly Ala Pro Ser Ala Ala Pro
          20             25             30
Glu Gln Val His Leu Ser Tyr Pro Gly Glu Pro Gly Ser Met Thr Val
          35             40             45
Thr Trp Thr Thr Trp Val Pro Thr Arg Ser Glu Val Gln Phe Gly Leu
          50             55             60
Gln Pro Ser Gly Pro Leu Pro Leu Arg Ala Gln Gly Thr Phe Val Pro
          65             70             75             80
Phe Val Asp Gly Gly Ile Leu Arg Arg Lys Leu Tyr Ile His Arg Val
          85             90             95
Thr Leu Arg Lys Leu Leu Pro Gly Val Gln Tyr Val Tyr Arg Cys Gly
          100            105            110
Ser Ala Gln Gly Trp Ser Arg Arg Phe Arg Phe Arg Ala Leu Lys Asn
          115            120            125
Gly Ala His Trp Ser Pro Arg Leu Ala Val Phe Gly Asp Leu Gly Ala
          130            135            140
Asp Asn Pro Lys Ala Val Pro Arg Leu Arg Arg Asp Thr Gln Gln Gly
          145            150            155            160
Met Tyr Asp Ala Val Leu His Val Gly Asp Phe Ala Tyr Asn Leu Asp
          165            170            175
Gln Asp Asn Ala Arg Val Gly Asp Arg Phe Met Arg Leu Ile Glu Pro
          180            185            190
Val Ala Ala Ser Leu Pro Tyr Met Thr Cys Pro Gly Asn His Glu Glu
          195            200            205
Arg Tyr Asn Phe Ser Asn Tyr Lys Ala Arg Phe Ser Met Pro Gly Asp
          210            215            220
Asn Glu Gly Leu Trp Tyr Ser Trp Asp Leu Gly Pro Ala His Ile Ile
          225            230            235            240

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Ser Phe Ser Thr Glu Val Tyr Phe Phe Leu His Tyr Gly Arg His Leu
 245 250 255
 Val Gln Arg Gln Phe Arg Trp Leu Glu Ser Asp Leu Gln Lys Ala Asn
 260 265 270
 Lys Asn Arg Ala Ala Arg Pro Trp Ile Ile Thr Met Gly His Arg Pro
 275 280 285
 Met Tyr Cys Ser Asn Ala Asp Leu Asp Asp Cys Thr Arg His Glu Ser
 290 295 300
 Lys Val Arg Lys Gly Leu Gln Gly Lys Leu Tyr Gly Leu Glu Asp Leu
 305 310 315 320
 Phe Tyr Lys Tyr Gly Val Asp Leu Gln Leu Trp Ala His Glu His Ser
 325 330 335
 Tyr Glu Arg Leu Trp Pro Ile Tyr Asn Tyr Gln Val Phe Asn Gly Ser
 340 345 350
 Arg Glu Met Pro Tyr Thr Asn Pro Arg Gly Pro Val His Ile Ile Thr
 355 360 365
 Gly Ser Ala Gly Cys Glu Glu Arg Leu Thr Pro Phe Ala Val Phe Pro
 370 375 380
 Arg Pro Trp Ser Ala Val Arg Val Lys Glu Tyr Gly Tyr Thr Arg Leu
 385 390 395 400
 His Ile Leu Asn Gly Thr His Thr His Ile Gln Gln Val Ser Asp Asp
 405 410 415
 Gln Asp Gly Lys Ile Val Asp Asp Val Trp Val Val Arg Pro Leu Phe
 420 425 430
 Gly Arg Arg Met Tyr Leu
 435

<210> 4731

<211> 607

<212> PRT

<213> Homo sapiens

<400> 4731

Met Ala Glu Glu Gly Ala Ile Leu Lys Val Thr Lys Asp Leu Arg Ala

1	5	10	15
Ala Val Ser Ala Ile Leu Gln Gly Tyr Gly Asp Gly Gln Gly Pro Val			
20	25	30	
Thr Asp Thr Ser Ala Glu Leu His Arg Leu Cys Gly Cys Leu Glu Leu			
35	40	45	
Leu Leu Gln Phe Asp Gln Lys Glu Gln Lys Ser Phe Leu Gly Pro Arg			
50	55	60	
Lys Asp Tyr Trp Asp Phe Leu Cys Thr Ala Leu Arg Arg Gln Arg Gly			
65	70	75	80
Asn Met Glu Pro Ile His Phe Val Arg Ser Gln Asp Lys Leu Lys Thr			
85	90	95	
Pro Leu Gly Lys Gly Arg Ala Phe Ile Arg Phe Cys Leu Ala Arg Gly			
100	105	110	
Gln Leu Ala Glu Ala Leu Gln Leu Cys Leu Leu Asn Ser Glu Leu Thr			
115	120	125	
Arg Glu Trp Tyr Gly Pro Arg Ser Pro Leu Leu Cys Pro Glu Arg Gln			
130	135	140	
Glu Asp Ile Leu Asp Ser Leu Tyr Ala Leu Asn Gly Val Ala Phe Glu			
145	150	155	160
Leu Asp Leu Gln Gln Pro Asp Leu Asp Gly Ala Trp Pro Met Phe Ser			
165	170	175	
Glu Ser Arg Cys Ser Ser Ser Thr Gln Thr Gln Gly Arg Arg Pro Arg			
180	185	190	
Lys Asn Lys Asp Ala Pro Lys Lys Val Pro Leu Pro Cys Leu His Ser			
195	200	205	
Glu Leu Pro Leu Pro His Leu Leu Gly Ile Leu Lys Ile Pro Ala Ala			
210	215	220	
Tyr Gly Gly Pro Glu Asn Val Gln Ile Glu Asp Ser His Thr Ser Gln			
225	230	235	240
Ala Ile Cys Leu Gln Asp Ala Pro Ser Gly Gln Gln Leu Ala Gly Leu			
245	250	255	
Pro Arg Ser Gln Gln Gln Arg His Leu Pro Phe Phe Leu Glu Lys Lys			
260	265	270	
Gly Glu Ser Ser Arg Lys His Arg Tyr Pro Gln Ser Met Trp Glu Pro			
275	280	285	
Glu Gly Lys Glu Leu Gln Leu Asp Gln Glu Glu Arg Ala Pro Trp Ile			

290	295	300
Glu Ile Phe Leu Gly Asn Ser Thr Pro Ser Thr Gln Gly Gln Gly Lys		
305	310	315
Gly Ala Met Gly Thr Gln Lys Glu Val Ile Gly Met Glu Ala Glu Val		
325	330	335
Thr Gly Val Leu Leu Val Ala Glu Gly Gln Arg Thr Thr Glu Gly Thr		
340	345	350
His Lys Lys Glu Ala Glu Trp Ser His Val Gln Arg Leu Leu Met Pro		
355	360	365
Ser Pro Arg Gly Ala Val Glu Gly Ala Val Ser Gly Ser Arg Gln Gly		
370	375	380
Ser Gly Gly Ser Ser Ile Leu Gly Glu Pro Trp Val Leu Gln Gly His		
385	390	395
Ala Thr Lys Glu Asp Ser Thr Val Glu Asn Pro Gln Val Gln Thr Glu		
405	410	415
Val Thr Leu Val Ala Arg Arg Glu Glu Gln Ala Glu Val Ser Leu Gln		
420	425	430
Asp Glu Ile Lys Ser Leu Arg Leu Gly Leu Arg Lys Ala Glu Glu Gln		
435	440	445
Ala Gln Arg Gln Glu Gln Leu Leu Arg Glu Gln Glu Gly Glu Leu Gln		
450	455	460
Ala Leu Arg Glu Gln Leu Ser Arg Cys Gln Glu Glu Arg Ala Glu Leu		
465	470	475
Gln Ala Gln Leu Glu Gln Lys Gln Gln Glu Ala Glu Arg Arg Asp Ala		
485	490	495
Met Tyr Gln Glu Glu Leu Gly Gly Gln Arg Asp Leu Val Gln Ala Met		
500	505	510
Lys Arg Arg Val Leu Glu Leu Ile Gln Glu Lys Asp Arg Leu Trp Gln		
515	520	525
Arg Leu Gln His Leu Ser Ser Met Ala Pro Glu Cys Cys Val Ala Cys		
530	535	540
Ser Lys Ile Phe Gly Arg Phe Ser Arg Arg Tyr Pro Cys Ser Ala Arg		
545	550	555
Thr Ser Leu Gly Arg Glu Glu Ser Glu Pro Pro Gly Glu Ala Ala Met		
565	570	575
Trp Arg Trp Arg Leu Trp Arg Gly Arg Ala Ser Gly His Pro Ser Gly		

	580		585		590									
Glu	Gly	Arg	Pro	Pro	Glu	Thr	Asn	Gln	Gly	His	Ser	Thr	Gly	Arg
	595		600		605									

<210> 4732

<211> 148

<212> PRT

<213> Homo sapiens

<400> 4732

Met	Ser	Cys	Asn	Leu	Ala	Ser	Leu	Cys	Ser	Lys	Val	Leu	Glu	Gln	Gly
1				5				10					15		
Ala	Tyr	His	Pro	Ile	Leu	Ile	Pro	Ser	Pro	Leu	Ser	Pro	Pro	Trp	Thr
			20					25					30		
His	Cys	Ala	Gln	His	Leu	Arg	Pro	Cys	Thr	Cys	Lys	Gly	Ser	Ser	His
		35					40					45			
Tyr	Gly	Asp	Gln	Gln	Pro	Arg	Ser	Gln	Val	Leu	Asn	Ser	Lys	Met	Leu
		50				55				60					
Leu	Ser	Ala	Ser	Val	Leu	Asp	Leu	Ser	Ser	Val	Asp	Ser	Asp	Ala	Phe
	65				70					75					80
Glu	Ile	Leu	Leu	Ser	Leu	Ala	Ser	Ile	Ala	Ile	Arg	Thr	Pro	Arg	Val
			85						90					95	
Cys	His	Pro	Leu	Leu	Pro	Leu	His	Phe	Ile	Leu	Leu	His	Lys	Gly	Gln
		100						105					110		
Pro	Ser	His	Val	Glu	Val	Leu	Trp	Asp	Ala	Ala	Trp	Leu	Phe	Phe	Ile
		115						120					125		
Val	Asp	Leu	Met	Phe	Ser	Ser	Ile	Leu	Leu	Cys	Thr	Phe	Leu	Arg	Leu
		130					135					140			
Gln	Tyr	Phe	Val												
145															

<210> 4733

<211> 392

<212> PRT

<213> Homo sapiens

<400> 4733

Met Gln Pro Leu Thr Lys Asp Ala Gly Met Ser Leu Ser Ser Val Thr
 1 5 10 15
 Leu Ala Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu
 20 25 30
 Ile Trp Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu
 35 40 45
 Arg Asn Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu
 50 55 60
 Ser Ala Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu
 65 70 75 80
 Ala Ala Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp
 85 90 95
 Glu Gln Pro Asp Ala Ser Gln Met His Val Tyr Ser Leu Gly Met Thr
 100 105 110
 Leu Tyr Trp Ser Ala Gly Phe His Val Pro Pro His Gln Pro Leu Gln
 115 120 125
 Leu Cys Glu Pro Leu His Ser Ile Leu Leu Thr Met Cys Glu Asp Gln
 130 135 140
 Pro His Arg Arg Cys Thr Leu Gln Ser Val Leu Glu Ala Cys Arg Val
 145 150 155 160
 His Glu Lys Glu Val Ser Val Tyr Pro Ala Pro Ala Gly Leu His Ile
 165 170 175
 Arg Arg Leu Val Gly Leu Val Leu Gly Thr Ile Ser Glu Val Glu Lys
 180 185 190
 Arg Val Val Glu Glu Ser Ser Ser Val Gln Gln Asn Arg Ser Tyr Leu
 195 200 205
 Leu Arg Lys Arg Leu Arg Gly Thr Ser Ser Glu Ser Pro Ala Ala Gln
 210 215 220
 Ala Pro Glu Cys Leu His Pro Cys Arg Val Ser Glu Arg Ser Thr Glu
 225 230 235 240
 Thr Gln Ser Ser Pro Glu Pro His Trp Ser Thr Leu Thr His Ser His
 245 250 255
 Cys Ser Leu Leu Val Asn Arg Ala Leu Pro Gly Ala Asp Pro Gln Asp

260 265 270
 Gln Gln Ala Gly Arg Arg Leu Ser Ser Gly Ser Val His Ser Ala Ala
 275 280 285
 Asp Ser Ser Trp Pro Thr Thr Pro Ser Gln Arg Gly Phe Leu Gln Arg
 290 295 300
 Arg Ser Lys Phe Ser Arg Pro Glu Phe Ile Leu Leu Ala Gly Glu Ala
 305 310 315 320
 Pro Met Thr Leu His Leu Pro Gly Ser Val Val Thr Lys Lys Gly Lys
 325 330 335
 Ser Tyr Leu Ala Leu Arg Asp Leu Cys Val Val Leu Leu Asn Gly Gln
 340 345 350
 His Leu Glu Val Lys Cys Asp Val Glu Ser Thr Val Gly Ala Val Phe
 355 360 365
 Asn Ala Val Thr Ser Phe Ala Asn Leu Glu Glu Leu Thr Tyr Phe Gly
 370 375 380
 Leu Ala Tyr Met Lys Ser Gly Glu
 385 390

<210> 4734

<211> 357

<212> PRT

<213> Homo sapiens

<400> 4734

Met Pro Glu Cys Trp Asp Gly Glu His Asp Ile Glu Thr Pro Tyr Gly
 1 5 10 15
 Leu Leu His Val Val Ile Arg Gly Ser Pro Lys Gly Asn Arg Pro Ala
 20 25 30
 Ile Leu Thr Tyr His Asp Val Gly Leu Asn Arg Lys Cys Ser Pro Ala
 35 40 45
 Ser Val Ser Pro Pro Leu Pro Pro Ile Ser Gln Ser Asp Lys Leu Cys
 50 55 60
 Phe Asn Thr Phe Phe Asn Phe Glu Asp Met Gln Glu Ile Thr Lys His
 65 70 75 80
 Phe Val Val Cys His Val Asp Ala Pro Gly Gln Gln Val Gly Ala Ser

	85		90		95
Gln Phe Pro Gln Gly Tyr Gln Phe	Pro Ser Met Glu Gln Leu Ala Ala				
100		105		110	
Met Leu Pro Ser Val Val Gln His	Phe Gly Phe Lys Tyr Val Ile Gly				
115		120		125	
Ile Gly Val Gly Ala Gly Ala Tyr	Val Leu Ala Lys Phe Ala Leu Ile				
130		135		140	
Phe Pro Asp Leu Val Glu Gly Leu	Val Leu Val Asn Ile Asp Pro Asn				
145		150		155	
Gly Lys Gly Trp Ile Asp Trp Ala	Ala Thr Lys Leu Ser Gly Leu Thr				
165		170		175	
Ser Thr Leu Pro Asp Thr Val Leu	Ser His Leu Phe Ser Gln Glu Glu				
180		185		190	
Leu Val Asn Asn Thr Glu Leu Val	Gln Ser Tyr Arg Gln Gln Ile Gly				
195		200		205	
Asn Val Val Asn Gln Ala Asn Leu	Gln Leu Phe Trp Asn Met Tyr Asn				
210		215		220	
Ser Arg Arg Asp Leu Asp Ile Asn	Arg Pro Gly Thr Val Pro Asn Ala				
225		230		235	
Lys Thr Leu Arg Cys Pro Val Met	Leu Val Val Gly Asp Asn Ala Pro				
245		250		255	
Ala Glu Asp Gly Val Val Glu Cys	Asn Ser Lys Leu Asp Pro Thr Thr				
260		265		270	
Thr Thr Phe Leu Lys Met Ala Asp	Ser Gly Gly Leu Pro Gln Val Thr				
275		280		285	
Gln Pro Gly Lys Leu Thr Glu Ala	Phe Lys Tyr Phe Leu Gln Gly Met				
290		295		300	
Gly Tyr Met Pro Ser Ala Ser Met	Thr Arg Leu Ala Arg Ser Arg Thr				
305		310		315	
Ala Ser Leu Thr Ser Ala Ser Ser	Val Asp Gly Ser Arg Pro Gln Ala				
325		330		335	
Cys Thr His Ser Glu Ser Ser Glu	Gly Leu Gly Gln Val Asn His Thr				
340		345		350	
Met Glu Val Ser Cys					
355					

<210> 4735

<211> 357

<212> PRT

<213> Homo sapiens

<400> 4735

```

Met Ser Pro Gly Pro Thr Asn Phe Phe Val Phe Leu Leu Glu Met Gly
  1             5             10             15
Phe His His Ala Gly Arg Val Gly Pro Glu Leu Leu Thr Ser Gly Asp
      20             25             30
Pro Leu Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Glu Thr Glu Gly
      35             40             45
Ser Glu Glu Asp Asp Lys Glu Asn Asp Lys Thr Glu Glu Met Pro Asn
      50             55             60
Asp Ser Val Leu Glu Asn Lys Ser Leu Gln Glu Asn Glu Glu Glu Glu
      65             70             75             80
Ile Gly Asn Leu Glu Leu Ala Trp Asp Met Pro Asp Leu Ala Lys Ile
      85             90             95
Ile Phe Lys Arg Gln Glu Thr Lys Glu Ala Gln Leu Tyr Ala Ala Gln
      100            105            110
Ala His Leu Lys Leu Gly Glu Val Ser Val Glu Ser Glu Asn Tyr Val
      115            120            125
Gln Ala Val Glu Glu Phe Gln Ser Cys Leu Asn Leu Gln Glu Gln Tyr
      130            135            140
Leu Glu Ala His Asp Arg Leu Leu Ala Glu Thr His Tyr Gln Leu Gly
      145            150            155            160
Leu Ala Tyr Gly Tyr Asn Ser Gln Tyr Asp Glu Ala Val Ala Gln Phe
      165            170            175
Ser Lys Ser Ile Glu Val Ile Glu Asn Arg Met Ala Val Leu Asn Glu
      180            185            190
Gln Val Lys Glu Ala Glu Gly Ser Ser Ala Glu Tyr Lys Lys Glu Ile
      195            200            205
Glu Glu Leu Lys Glu Leu Leu Pro Glu Ile Arg Glu Lys Ile Glu Asp

```

210

215

220

Ala Lys Glu Ser Gln Arg Ser Gly Asn Val Ala Glu Leu Ala Leu Lys
 225 230 235 240
 Ala Thr Leu Val Glu Ser Ser Thr Ser Gly Phe Thr Pro Gly Gly Gly
 245 250 255
 Gly Ser Ser Val Ser Met Ile Ala Ser Arg Lys Pro Thr Asp Gly Ala
 260 265 270
 Ser Ser Ser Asn Cys Val Thr Asp Ile Ser His Leu Val Arg Lys Lys
 275 280 285
 Arg Lys Pro Glu Glu Glu Ser Pro Arg Lys Asp Asp Ala Lys Lys Ala
 290 295 300
 Lys Gln Glu Pro Glu Val Asn Gly Gly Ser Gly Asp Ala Val Pro Ser
 305 310 315 320
 Gly Asn Glu Val Ser Glu Asn Met Glu Glu Glu Ala Glu Asn Gln Ala
 325 330 335
 Glu Ser Arg Ala Ala Val Glu Gly Thr Val Glu Ala Gly Ala Thr Val
 340 345 350
 Glu Ser Thr Ala Cys
 355

<210> 4736

<211> 217

<212> PRT

<213> Homo sapiens

<400> 4736

Met Leu Ser Leu Gln Asp Ser Val Phe Phe Glu Ile Ser Ile Lys Ser
 1 5 10 15
 Leu Leu Lys Ser Trp Ser Ser Ser Ser Ser Ala Pro Val Ser Lys Val
 20 25 30
 Asn Lys Tyr Cys Ala Ser Ser Asn Phe His Ser Thr Trp Gly Lys Lys
 35 40 45
 Asn Ile Ile Met Ser Asn Ile Thr Ile Asp Pro Asp Val Lys Pro Gly
 50 55 60
 Glu Tyr Val Ile Lys Ser Leu Phe Ala Glu Phe Ala Val Gln Ala Glu
 65 70 75 80

Lys Lys Ile Glu Val Val Met Ala Glu Pro Leu Glu Lys Leu Leu Ser
 85 90 95
 Arg Ser Leu Gln Arg Gly Glu Asp Leu Gln Phe Asp Gln Leu Ile Ser
 100 105 110
 Ser Met Ser Ser Val Ala Glu His Cys Leu Pro Ser Leu Leu Arg Thr
 115 120 125
 Leu Phe Asp Trp Tyr Arg Arg Gln Asn Gly Thr Glu Asp Glu Ser Tyr
 130 135 140
 Glu Tyr Arg Pro Arg Ser Ser Thr Lys Ser Lys Gly Asp Glu Gln Gln
 145 150 155 160
 Arg Glu Arg Asp Tyr Leu Leu Glu Arg Arg Asp Leu Ala Val Asp Phe
 165 170 175
 Ile Phe Cys Leu Val Leu Val Glu Val Leu Lys Gln Val Ser Ser Phe
 180 185 190
 Ile Ser Ala Lys Ser Val Phe Leu Ile Leu Cys Leu Leu Cys Leu Arg
 195 200 205
 Val Ser Val Thr Leu Arg Cys Cys Val
 210 215

<210> 4737

<211> 908

<212> PRT

<213> Homo sapiens

<400> 4737

Met Gly Val Asn Asp Leu Trp Gln Ile Leu Glu Pro Val Lys Gln His
 1 5 10 15
 Ile Pro Leu Arg Asn Leu Gly Gly Lys Thr Ile Ala Val Asp Leu Ser
 20 25 30
 Leu Trp Val Cys Glu Ala Gln Thr Val Lys Lys Met Met Gly Ser Val
 35 40 45
 Met Lys Pro His Leu Arg Asn Leu Phe Phe Arg Ile Ser Tyr Leu Thr
 50 55 60
 Gln Met Asp Val Lys Leu Val Phe Val Met Glu Gly Glu Pro Pro Lys
 65 70 75 80

Leu Lys Ala Asp Val Ile Ser Lys Arg Asn Gln Thr Arg Tyr Gly Ser
 85 90 95
 Ser Gly Lys Ser Trp Ser Gln Lys Thr Gly Arg Ser His Phe Lys Ser
 100 105 110
 Val Leu Arg Glu Cys Leu His Met Leu Glu Cys Leu Gly Ile Pro Trp
 115 120 125
 Val Gln Ala Ala Gly Glu Ala Glu Ala Met Cys Ala Tyr Leu Asn Ala
 130 135 140
 Gly Gly His Val Asp Gly Cys Leu Thr Asn Asp Gly Asp Thr Phe Leu
 145 150 155 160
 Tyr Gly Ala Gln Thr Val Tyr Arg Asn Phe Thr Met Asn Thr Lys Asp
 165 170 175
 Pro His Val Asp Cys Tyr Thr Met Ser Ser Ile Lys Ser Lys Leu Gly
 180 185 190
 Leu Asp Arg Asp Ala Leu Val Gly Leu Ala Ile Leu Leu Gly Cys Asp
 195 200 205
 Tyr Leu Pro Lys Gly Val Pro Gly Val Gly Lys Glu Gln Ala Leu Lys
 210 215 220
 Leu Ile Gln Ile Leu Lys Gly Gln Ser Leu Leu Gln Arg Phe Asn Arg
 225 230 235 240
 Trp Asn Glu Thr Ser Cys Asn Ser Ser Pro Gln Leu Leu Val Thr Lys
 245 250 255
 Lys Leu Ala His Cys Ser Val Cys Ser His Pro Gly Ser Pro Lys Asp
 260 265 270
 His Glu Arg Asn Gly Cys Arg Leu Cys Lys Ser Asp Lys Tyr Cys Glu
 275 280 285
 Pro His Asp Tyr Glu Tyr Cys Cys Pro Cys Glu Trp His Arg Thr Glu
 290 295 300
 His Asp Arg Gln Leu Asn Glu Val Glu Asn Asn Ile Lys Lys Lys Ala
 305 310 315 320
 Cys Cys Cys Glu Gly Phe Pro Phe His Glu Val Ile Gln Glu Phe Leu
 325 330 335
 Leu Asn Lys Asp Lys Leu Val Lys Val Ile Arg Tyr Gln Arg Pro Asp
 340 345 350
 Leu Leu Leu Phe Gln Arg Phe Thr Leu Glu Lys Met Glu Trp Pro Asn
 355 360 365

His Tyr Ala Cys Glu Lys Leu Leu Val Leu Leu Thr His Tyr Asp Met
 370 375 380
 Ile Glu Arg Lys Leu Gly Ser Arg Asn Ser Asn Gln Leu Gln Pro Ile
 385 390 395 400
 Arg Ile Val Lys Thr Arg Ile Arg Asn Gly Val His Cys Phe Glu Ile
 405 410 415
 Glu Trp Glu Lys Pro Glu His Tyr Ala Met Glu Asp Lys Gln His Gly
 420 425 430
 Glu Phe Ala Leu Leu Thr Ile Glu Glu Glu Ser Leu Phe Glu Ala Ala
 435 440 445
 Tyr Pro Glu Ile Val Ala Val Tyr Gln Lys Gln Lys Leu Glu Ile Lys
 450 455 460
 Gly Lys Lys Gln Lys Arg Ile Lys Pro Lys Glu Asn Asn Leu Pro Glu
 465 470 475 480
 Pro Asp Glu Val Met Ser Phe Gln Ser His Met Thr Leu Lys Pro Thr
 485 490 495
 Cys Glu Ile Phe His Lys Gln Asn Ser Lys Leu Asn Ser Gly Ile Ser
 500 505 510
 Pro Asp Pro Thr Leu Pro Gln Glu Ser Ile Ser Ala Ser Leu Asn Ser
 515 520 525
 Leu Leu Leu Pro Lys Asn Thr Pro Cys Leu Asn Ala Gln Glu Gln Phe
 530 535 540
 Met Ser Ser Leu Arg Pro Leu Ala Ile Gln Gln Ile Lys Ala Val Ser
 545 550 555 560
 Lys Ser Leu Ile Ser Glu Ser Ser Gln Pro Asn Thr Ser Ser His Asn
 565 570 575
 Ile Ser Val Ile Ala Asp Leu His Leu Ser Thr Ile Asp Trp Glu Gly
 580 585 590
 Thr Ser Phe Ser Asn Ser Pro Ala Ile Gln Arg Asn Thr Phe Ser His
 595 600 605
 Asp Leu Lys Ser Glu Val Glu Ser Glu Leu Ser Ala Ile Pro Asp Gly
 610 615 620
 Phe Glu Asn Ile Pro Glu Gln Leu Ser Cys Glu Ser Glu Arg Tyr Thr
 625 630 635 640
 Ala Asn Ile Lys Lys Val Leu Asp Glu Asp Ser Asp Gly Ile Ser Pro
 645 650 655

Glu Glu His Leu Leu Ser Gly Ile Thr Asp Leu Cys Leu Gln Asp Leu
 660 665 670
 Pro Leu Lys Glu Arg Ile Phe Ile Lys Leu Ser Tyr Pro Gln Asp Asn
 675 680 685
 Leu Gln Pro Asp Val Asn Leu Lys Thr Leu Ser Ile Leu Ser Val Lys
 690 695 700
 Glu Ser Cys Ile Ala Asn Ser Gly Ser Asp Cys Thr Ser His Leu Ser
 705 710 715 720
 Lys Asp Leu Pro Gly Ile Pro Leu Gln Asn Glu Ser Arg Asp Ser Lys
 725 730 735
 Ile Leu Lys Gly Asp Gln Leu Leu Gln Glu Asp Tyr Lys Val Asn Thr
 740 745 750
 Ser Val Pro Tyr Ser Val Ser Asn Thr Val Val Lys Thr Cys Asn Val
 755 760 765
 Arg Pro Pro Asn Thr Ala Leu Asp His Ser Arg Lys Val Asp Met Gln
 770 775 780
 Thr Thr Arg Lys Ile Leu Met Lys Lys Ser Val Cys Leu Asp Arg His
 785 790 795 800
 Ser Ser Asp Glu Gln Ser Ala Pro Val Phe Gly Lys Ala Lys Tyr Thr
 805 810 815
 Thr Gln Arg Met Lys His Ser Ser Gln Lys His Asn Ser Ser His Phe
 820 825 830
 Lys Glu Ser Gly His Asn Lys Leu Ser Ser Pro Lys Ile His Ile Lys
 835 840 845
 Glu Thr Glu Gln Cys Val Arg Ser Tyr Glu Thr Ala Glu Asn Glu Glu
 850 855 860
 Ser Cys Phe Pro Asp Ser Thr Lys Ser Ser Leu Ser Ser Leu Gln Cys
 865 870 875 880
 His Lys Lys Glu Asn Asn Ser Gly Thr Cys Leu Asp Ser Pro Leu Pro
 885 890 895
 Leu Cys Gln Arg Leu Lys Leu Arg Phe Gln Ser Thr
 900 905

<210> 4738

<211> 637

<212> PRT

<213> Homo sapiens

<400> 4738

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Met Leu Pro Asn Phe Lys Leu Tyr Asn Phe Ile Glu Ile Phe Phe Lys
  1             5             10             15
Pro Leu Thr Pro Ser Lys Asn Arg Phe His Phe Val Ser Tyr Phe Glu
      20             25             30
Asn Val Asn Phe Met Leu Cys Trp Leu Gln Glu Asn Asn Phe Cys Leu
      35             40             45
Leu Leu Cys Phe Leu Ser Gly Leu Leu Ser Arg His Lys Thr Lys Lys
      50             55             60
Leu Ser Ser Glu Lys Asp Ile His Glu Ile Ser Leu Ser Lys Glu Ser
      65             70             75             80
Ile Ile Glu Lys Ser Lys Thr Leu Arg Leu Lys Gly Ser Ile Phe Arg
      85             90             95
Asn Glu Trp Gln Asn Lys Ser Glu Phe Glu Gly Gln Gln Gly Leu Lys
      100            105            110
Glu Arg Ser Ile Ser Gln Lys Lys Ile Val Ser Lys Lys Met Ser Thr
      115            120            125
Asp Arg Lys Arg Pro Ser Phe Thr Leu Asn Gln Arg Ile His Asn Ser
      130            135            140
Glu Lys Ser Cys Asp Ser His Leu Val Gln His Gly Lys Ile Asp Ser
      145            150            155            160
Asp Val Lys His Asp Cys Lys Glu Cys Gly Ser Thr Phe Asn Asn Val
      165            170            175
Tyr Gln Leu Thr Leu His Gln Lys Ile His Thr Gly Glu Lys Ser Cys
      180            185            190
Lys Cys Glu Lys Cys Gly Lys Val Phe Ser His Ser Tyr Gln Leu Thr
      195            200            205
Leu His Gln Arg Phe His Thr Gly Glu Lys Pro Tyr Glu Cys Gln Glu
      210            215            220
Cys Gly Lys Thr Phe Thr Leu Tyr Pro Gln Leu Asn Arg His Gln Lys
      225            230            235            240
Ile His Thr Gly Lys Lys Pro Tyr Met Cys Lys Lys Cys Asp Lys Gly
      245            250            255

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Phe Phe Ser Arg Leu Glu Leu Thr Gln His Lys Arg Ile His Thr Gly
 260 265 270
 Lys Lys Ser Tyr Glu Cys Lys Glu Cys Gly Lys Val Phe Gln Leu Ile
 275 280 285
 Phe Tyr Phe Lys Glu His Glu Arg Ile His Thr Gly Lys Lys Pro Tyr
 290 295 300
 Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Val Cys Gly Gln Leu Thr
 305 310 315 320
 Arg His Gln Lys Ile His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu
 325 330 335
 Cys Gly Lys Thr Phe Arg Leu Ser Phe Tyr Leu Thr Glu His Arg Arg
 340 345 350
 Thr His Ala Gly Lys Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser
 355 360 365
 Phe Asn Val Arg Gly Gln Leu Asn Arg His Lys Thr Ile His Thr Gly
 370 375 380
 Ile Lys Pro Phe Ala Cys Lys Val Cys Glu Lys Ala Phe Ser Tyr Ser
 385 390 395 400
 Gly Asp Leu Arg Val His Ser Arg Ile His Thr Gly Glu Lys Pro Tyr
 405 410 415
 Glu Cys Lys Glu Cys Gly Lys Ala Phe Met Leu Arg Ser Val Leu Thr
 420 425 430
 Glu His Gln Arg Leu His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu
 435 440 445
 Cys Gly Lys Thr Phe Arg Val Arg Ser Gln Ile Ser Leu His Lys Lys
 450 455 460
 Ile His Thr Asp Val Lys Pro Tyr Lys Cys Val Arg Cys Gly Lys Thr
 465 470 475 480
 Phe Arg Phe Gly Phe Tyr Leu Thr Glu His Gln Arg Ile His Thr Gly
 485 490 495
 Glu Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Arg Arg
 500 505 510
 Gly Asn Leu Lys Glu His Leu Lys Ile His Ser Gly Leu Lys Pro Tyr
 515 520 525
 Asp Cys Lys Glu Cys Gly Lys Ser Phe Ser Arg Arg Gly Gln Phe Thr

530 535 540
 Glu His Gln Lys Ile His Thr Gly Val Lys Pro Tyr Lys Cys Lys Glu
 545 550 555 560
 Cys Gly Lys Ala Phe Ser Arg Ser Val Asp Leu Arg Ile His Gln Arg
 565 570 575
 Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala
 580 585 590
 Phe Arg Leu Asn Ser His Leu Thr Glu His Gln Arg Ile His Thr Gly
 595 600 605
 Glu Lys Pro Tyr Glu Cys Lys Val Cys Arg Lys Ala Phe Arg Gln Tyr
 610 615 620
 Ser His Leu Tyr Gln His Gln Lys Thr His Asn Val Ile
 625 630 635

<210> 4739

<211> 170

<212> PRT

<213> Homo sapiens

<400> 4739

Met Arg Ala Ala Val Pro His Gln Gly Ile Lys Phe Phe Lys Thr Leu
 1 5 10 15
 Val Pro Tyr Asp Glu Gly Ala Pro Ala Phe Glu Gly Arg Ala Pro Ala
 20 25 30
 Phe Ser His Ala Ser Leu His Pro Arg Tyr Asp Leu Met Tyr Gln Cys
 35 40 45
 Trp Ser Ala Asp Pro Lys Gln Arg Pro Ser Phe Thr Cys Leu Arg Met
 50 55 60
 Glu Leu Glu Asn Ile Leu Gly Gln Leu Ser Val Leu Ser Ala Ser Gln
 65 70 75 80
 Asp Pro Leu Tyr Ile Asn Ile Glu Arg Ala Glu Glu Pro Thr Ala Gly
 85 90 95
 Gly Ser Leu Glu Leu Pro Gly Arg Asp Gln Pro Tyr Ser Gly Ala Gly
 100 105 110
 Asp Gly Ser Gly Met Gly Ala Val Gly Gly Thr Pro Ser Asp Cys Arg

115 120 125
 Tyr Ile Leu Thr Pro Gly Gly Leu Ala Glu Gln Pro Gly Gln Ala Glu
 130 135 140
 His Gln Pro Glu Ser Pro Leu Asn Glu Thr Gln Arg Leu Leu Leu Leu
 145 150 155 160
 Gln Gln Gly Leu Leu Pro His Ser Ser Cys
 165 170

<210> 4740

<211> 492

<212> PRT

<213> Homo sapiens

<400> 4740

Met Ala Ser Pro Ser Gly Lys Gly Ala Arg Ala Leu Glu Ala Pro Gly
 1 5 10 15
 Cys Gly Pro Arg Pro Leu Ala Arg Asp Leu Val Asp Ser Val Asp Asp
 20 25 30
 Ala Glu Gly Leu Tyr Val Ala Val Glu Arg Cys Pro Leu Cys Asn Thr
 35 40 45
 Thr Arg Arg Arg Leu Thr Cys Ala Lys Cys Val Gln Ser Gly Asp Phe
 50 55 60
 Val Tyr Phe Asp Gly Arg Asp Arg Glu Arg Phe Ile Asp Lys Lys Glu
 65 70 75 80
 Arg Leu Ser Arg Leu Lys Ser Lys Gln Glu Glu Phe Gln Lys Glu Val
 85 90 95
 Leu Lys Ala Met Glu Gly Lys Trp Ile Thr Asp Gln Leu Arg Trp Lys
 100 105 110
 Ile Met Ser Cys Lys Met Arg Ile Glu Gln Leu Lys Gln Thr Ile Cys
 115 120 125
 Lys Gly Asn Glu Glu Met Glu Lys Asn Ser Glu Gly Leu Leu Lys Thr
 130 135 140
 Lys Glu Lys Asn Gln Lys Leu Tyr Ser Arg Ala Gln Arg His Gln Glu
 145 150 155 160
 Lys Lys Glu Lys Ile Gln Arg His Asn Arg Lys Leu Gly Asp Leu Val

	165		170		175
Glu Lys Lys Thr Ile Asp Leu Arg Ser His Tyr Glu Arg Leu Ala Asn					
	180		185		190
Leu Arg Arg Ser His Ile Leu Glu Leu Thr Ser Val Ile Phe Pro Ile					
	195		200		205
Glu Glu Val Lys Thr Gly Val Arg Asp Pro Ala Asp Val Ser Ser Glu					
	210		215		220
Ser Asp Ser Ala Met Thr Ser Ser Thr Val Ser Lys Leu Ala Glu Ala					
225		230		235	240
Arg Arg Thr Thr Tyr Leu Ser Gly Arg Trp Val Cys Asp Asp His Asn					
	245		250		255
Gly Asp Thr Ser Ile Ser Ile Thr Gly Pro Trp Ile Ser Leu Pro Asn					
	260		265		270
Asn Gly Asp Tyr Ser Ala Tyr Tyr Ser Trp Val Glu Glu Lys Lys Thr					
	275		280		285
Thr Gln Gly Pro Asp Met Glu Gln Ser Asn Pro Ala Tyr Thr Ile Ser					
	290		295		300
Ala Ala Leu Cys Tyr Ala Thr Gln Leu Val Asn Ile Leu Ser His Ile					
305		310		315	320
Leu Asp Val Asn Leu Pro Lys Lys Leu Cys Asn Ser Glu Phe Cys Gly					
	325		330		335
Glu Asn Leu Ser Lys Gln Lys Phe Thr Arg Ala Val Lys Lys Leu Asn					
	340		345		350
Ala Asn Ile Leu Tyr Leu Cys Phe Ser Gln His Val Asn Leu Asp Gln					
	355		360		365
Leu Gln Pro Leu His Thr Leu Arg Asn Leu Met Tyr Leu Val Ser Pro					
	370		375		380
Ser Ser Glu His Leu Gly Arg Ser Gly Pro Phe Glu Val Arg Ala Asp					
385		390		395	400
Leu Glu Glu Ser Met Glu Phe Val Asp Pro Gly Val Ala Gly Glu Ser					
	405		410		415
Asp Glu Ser Gly Asp Glu Arg Val Ser Asp Glu Glu Thr Asp Leu Gly					
	420		425		430
Thr Asp Trp Glu Asn Leu Pro Ser Pro Arg Phe Cys Asp Ile Pro Ser					
	435		440		445
Gln Ser Val Glu Val Ser Gln Ser Gln Ser Thr Gln Ala Ser Pro Pro					

450 455 460
 Ile Ala Ser Ser Ser Ala Gly Gly Met Ile Ser Ser Ala Ala Ala Ser
 465 470 475 480
 Val Thr Ser Trp Phe Lys Ala Tyr Thr Gly His Arg
 485 490

<210> 4741

<211> 415

<212> PRT

<213> Homo sapiens

<400> 4741

Met Leu Ser Met Thr Tyr Ser Glu Ser Leu Arg Ser Val Ser Ser Arg
 1 5 10 15
 Cys His Ser Glu Trp Ala Leu His Pro Val Arg Gln Thr Asp Thr Leu
 20 25 30
 Glu Leu Gln Arg Leu Arg Glu Val Arg Ala Ala Ala Gln Ala Arg Asn
 35 40 45
 Met Glu Ser Phe Leu Arg Met His Gly Leu Ser Leu Asp Gly Cys Thr
 50 55 60
 Ala Gln Arg Thr Gly Met Lys Tyr Arg Asn Leu Gly Lys Ser Gly Leu
 65 70 75 80
 Arg Val Ser Cys Leu Gly Leu Gly Thr Trp Val Thr Phe Gly Gly Gln
 85 90 95
 Ile Thr Asp Glu Met Ala Glu Gln Leu Met Thr Leu Ala Tyr Asp Asn
 100 105 110
 Gly Ile Asn Leu Phe Asp Thr Ala Glu Val Tyr Ala Ala Gly Lys Ala
 115 120 125
 Glu Val Val Leu Gly Asn Ile Ile Lys Lys Lys Gly Trp Arg Arg Ser
 130 135 140
 Ser Leu Val Ile Thr Thr Lys Ile Phe Trp Gly Gly Lys Ala Glu Thr
 145 150 155 160
 Glu Arg Gly Leu Ser Arg Lys His Ile Ile Glu Gly Leu Lys Ala Ser
 165 170 175
 Leu Glu Arg Leu Gln Leu Glu Tyr Val Asp Val Val Phe Ala Asn Arg

180	185	190
Pro Asp Pro Asn Thr Pro Met Glu Gly Asp Pro Phe Ser Ser Ser Lys		
195	200	205
Ser Arg Thr Phe Ile Ile Glu Glu Thr Val Arg Ala Met Thr His Val		
210	215	220
Ile Asn Gln Gly Met Ala Met Tyr Trp Gly Thr Ser Arg Trp Ser Ser		
225	230	235
Met Glu Ile Met Glu Ala Tyr Ser Val Ala Arg Gln Phe Asn Leu Thr		
245	250	255
Pro Pro Ile Cys Glu Gln Ala Glu Tyr His Met Phe Gln Arg Glu Lys		
260	265	270
Val Glu Val Gln Leu Pro Glu Leu Phe His Lys Ile Gly Val Gly Ala		
275	280	285
Met Thr Trp Ser Pro Leu Ala Cys Gly Ile Val Ser Gly Lys Tyr Asp		
290	295	300
Ser Gly Ile Pro Pro Tyr Ser Arg Ala Ser Leu Lys Gly Tyr Gln Trp		
305	310	315
Leu Lys Asp Lys Ile Leu Ser Glu Glu Gly Arg Arg Gln Gln Ala Lys		
325	330	335
Leu Lys Glu Leu Gln Ala Ile Ala Glu Arg Leu Gly Cys Thr Leu Pro		
340	345	350
Gln Leu Ala Ile Ala Trp Cys Leu Arg Asn Glu Gly Val Ser Ser Val		
355	360	365
Leu Leu Gly Ala Ser Asn Ala Asp Gln Leu Met Glu Asn Ile Gly Ala		
370	375	380
Ile Gln Val Leu Pro Lys Leu Ser Ser Ser Ile Ile His Glu Ile Asp		
385	390	395
Ser Ile Leu Gly Asn Lys Pro Tyr Ser Lys Lys Asp Tyr Arg Ser		
405	410	415

<210> 4742

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4742

Met Arg Gln Trp Pro Val Ala Val Pro Cys Ser Arg Gln Gln Cys Cys
 1 5 10 15
 Arg Ser Ser Leu Gln Pro Thr Ile Cys His Tyr Phe Met Arg Leu Leu
 20 25 30
 Lys Asp Lys Gly Leu Leu Leu Arg Cys Tyr Thr Gln Asn Ile Asp Thr
 35 40 45
 Leu Glu Arg Ile Ala Gly Leu Glu Gln Glu Asp Leu Val Glu Ala His
 50 55 60
 Gly Thr Phe Tyr Thr Ser His Cys Val Ser Ala Ser Cys Arg His Glu
 65 70 75 80
 Tyr Pro Leu Ser Trp Met Lys Glu Lys Ile Phe Ser Glu Val Thr Pro
 85 90 95
 Lys Cys Glu Asp Cys Gln Ser Leu Val Lys Pro Gly Glu Pro Leu Ala
 100 105 110
 Arg Asp Leu Pro Arg Trp Ile Trp Val Gly Val Pro Ser Ser Pro
 115 120 125

<210> 4743

<211> 540

<212> PRT

<213> Homo sapiens

<400> 4743

Met Pro Asn Lys Asn Lys Lys Glu Lys Glu Ser Pro Lys Ala Gly Lys
 1 5 10 15
 Ser Gly Lys Ser Ser Lys Glu Gly Gln Asp Thr Val Glu Ser Glu Gln
 20 25 30
 Ile Ser Val Arg Lys Asn Ser Leu Val Ala Val Pro Ser Thr Val Ser
 35 40 45
 Ala Lys Ile Lys Val Pro Val Ser Gln Pro Ile Val Lys Lys Asp Lys
 50 55 60
 Arg Gln Asn Ser Ser Arg Phe Ser Ala Ser Asn Asn Arg Glu Leu Gln
 65 70 75 80

Lys Leu Pro Ser Leu Lys Asp Val Pro Pro Ala Asp Gln Glu Lys Leu
 85 90 95
 Phe Ile Gln Lys Leu Arg Gln Cys Cys Val Leu Phe Asp Phe Val Ser
 100 105 110
 Asp Pro Leu Ser Asp Leu Lys Trp Lys Glu Val Lys Arg Ala Ala Leu
 115 120 125
 Ser Glu Met Val Glu Tyr Ile Thr His Asn Arg Asn Val Ile Thr Glu
 130 135 140
 Pro Ile Tyr Pro Glu Val Val His Met Phe Ala Val Asn Met Phe Arg
 145 150 155 160
 Thr Leu Pro Pro Ser Ser Asn Pro Thr Gly Ala Glu Phe Asp Pro Glu
 165 170 175
 Glu Asp Glu Pro Thr Leu Glu Ala Ala Trp Pro His Leu Gln Leu Val
 180 185 190
 Tyr Glu Phe Phe Leu Arg Phe Leu Glu Ser Pro Asp Phe Gln Pro Asn
 195 200 205
 Ile Ala Lys Lys Tyr Ile Asp Gln Lys Phe Val Leu Gln Leu Leu Glu
 210 215 220
 Leu Phe Asp Ser Glu Asp Pro Arg Glu Arg Asp Phe Leu Lys Thr Thr
 225 230 235 240
 Leu His Arg Ile Tyr Gly Lys Phe Leu Gly Leu Arg Ala Tyr Ile Arg
 245 250 255
 Lys Gln Ile Asn Asn Ile Phe Tyr Arg Phe Ile Tyr Glu Thr Glu His
 260 265 270
 His Asn Gly Ile Ala Glu Leu Leu Glu Ile Leu Gly Ser Ile Ile Asn
 275 280 285
 Gly Phe Ala Leu Pro Leu Lys Glu Glu His Lys Ile Phe Leu Leu Lys
 290 295 300
 Val Leu Leu Pro Leu His Lys Val Lys Ser Leu Ser Val Tyr His Pro
 305 310 315 320
 Gln Leu Ala Tyr Cys Val Val Gln Phe Leu Glu Lys Asp Ser Thr Leu
 325 330 335
 Thr Glu Pro Val Val Met Ala Leu Leu Lys Tyr Trp Pro Lys Thr His
 340 345 350
 Ser Pro Lys Glu Val Met Phe Leu Asn Glu Leu Glu Glu Ile Leu Asp
 355 360 365

Val Ile Glu Pro Ser Glu Phe Val Lys Ile Met Glu Pro Leu Phe Arg
 370 375 380
 Gln Leu Ala Lys Cys Val Ser Ser Pro His Phe Gln Val Ala Glu Arg
 385 390 395 400
 Ala Leu Tyr Tyr Trp Asn Asn Glu Tyr Ile Met Ser Leu Ile Ser Asp
 405 410 415
 Asn Ala Ala Lys Ile Leu Pro Ile Met Phe Pro Ser Leu Tyr Arg Asn
 420 425 430
 Ser Lys Thr His Trp Asn Lys Thr Ile His Gly Leu Ile Tyr Asn Ala
 435 440 445
 Leu Lys Leu Phe Met Glu Met Asn Gln Lys Leu Phe Asp Asp Cys Thr
 450 455 460
 Gln Gln Phe Lys Ala Glu Lys Leu Lys Glu Lys Leu Lys Met Lys Glu
 465 470 475 480
 Arg Glu Glu Ala Trp Val Lys Ile Glu Asn Leu Ala Lys Ala Asn Pro
 485 490 495
 Gln Ala Gln Lys Asp Pro Lys Lys Asp Arg Pro Leu Ala Arg Arg Lys
 500 505 510
 Ser Glu Leu Pro Gln Asp Pro His Thr Lys Lys Ala Leu Glu Ala His
 515 520 525
 Cys Arg Ala Asp Glu Leu Ala Ser Gln Asp Gly Arg
 530 535 540

<210> 4744

<211> 361

<212> PRT

<213> Homo sapiens

<400> 4744

Met His Cys Ser Cys Leu Ala Glu Gly Ile Pro Ala Asn Pro Gly Asn
 1 5 10 15
 Trp Ile Ser Gly Leu Ala Phe Pro Asp Trp Ala Tyr Lys Ala Glu Ser
 20 25 30
 Ser Pro Gly Ser Arg Gln Ile Gln Leu Trp His Phe Ile Leu Glu Leu
 35 40 45

Leu Gln Lys Glu Glu Phe Arg His Val Ile Ala Trp Gln Gln Gly Glu
 50 55 60
 Tyr Gly Glu Phe Val Ile Lys Asp Pro Asp Glu Val Ala Arg Leu Trp
 65 70 75 80
 Gly Arg Arg Lys Cys Lys Pro Gln Met Asn Tyr Asp Lys Leu Ser Arg
 85 90 95
 Ala Leu Arg Tyr Tyr Tyr Asn Lys Arg Ile Leu His Lys Thr Lys Gly
 100 105 110
 Lys Arg Phe Thr Tyr Lys Phe Asn Phe Ser Lys Leu Ile Val Val Asn
 115 120 125
 Tyr Pro Leu Trp Glu Val Arg Ala Pro Pro Ser Pro His Leu Leu Leu
 130 135 140
 Gly Ala Pro Ala Leu Cys Arg Pro Ala Leu Val Pro Val Gly Val Gln
 145 150 155 160
 Ser Glu Leu Leu His Ser Met Leu Phe Ala His Gln Ala Met Val Glu
 165 170 175
 Gln Leu Thr Gly Gln Gln Thr Pro Arg Gly Pro Pro Glu Thr Ser Gly
 180 185 190
 Asp Lys Lys Gly Ser Ser Ser Ser Val Tyr Arg Leu Gly Ser Ala Pro
 195 200 205
 Gly Pro Cys Arg Leu Gly Leu Cys Cys His Leu Gly Ser Val Gln Gly
 210 215 220
 Glu Leu Pro Gly Val Ala Ser Phe Thr Pro Pro Leu Pro Pro Pro Leu
 225 230 235 240
 Pro Ser Asn Trp Thr Cys Leu Ser Gly Pro Phe Leu Pro Pro Leu Pro
 245 250 255
 Ser Glu Gln Gln Leu Pro Gly Ala Phe Lys Pro Asp Ile Leu Leu Pro
 260 265 270
 Gly Pro Arg Ser Leu Pro Gly Ala Trp His Phe Pro Gly Leu Pro Leu
 275 280 285
 Leu Ala Gly Leu Gly Gln Gly Ala Gly Glu Arg Leu Trp Leu Leu Ser
 290 295 300
 Leu Arg Pro Glu Gly Leu Glu Val Lys Pro Ala Pro Met Met Glu Ala
 305 310 315 320
 Lys Gly Gly Leu Asp Pro Arg Glu Val Phe Cys Pro Glu Thr Arg Arg
 325 330 335

Leu Lys Thr Gly Glu Glu Ser Leu Thr Ser Pro Asn Leu Glu Asn Leu
 340 345 350
 Lys Ala Val Trp Pro Leu Asp Pro Pro
 355 360

<210> 4745

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4745

Met Met Lys Thr Leu Asn Ile Leu Asp Met Glu Gly Met Phe Leu Asn
 1 5 10 15
 Thr Ile Lys Ala Ile Tyr Asp Lys Leu Ile Ala Asn Ile Val Leu Ser
 20 25 30
 Gly Lys Lys Leu Lys Ala Phe Pro Ile Arg Pro Arg Thr Arg Gln Gly
 35 40 45
 Cys Pro Leu Leu Pro Leu Leu Phe Asn Ile Val Pro Glu Val Leu Ala
 50 55 60
 Arg Ala Ile Arg Gln Glu Lys Glu Ile Lys Asp Ile Gln Ile Gly Lys
 65 70 75 80
 Ser Glu Met Lys Leu Ser Leu Phe Ala Asp Asn Met Ile Leu His Ile
 85 90 95
 Glu Asn Leu Lys Asp Cys Thr Lys Thr Pro Phe Glu Leu Asp Lys Ser
 100 105 110
 Ser Lys Val Ala Gly Tyr Lys Ile Asn Leu Gln Lys Ser Val His Phe
 115 120 125
 Tyr Thr Leu Thr Val Asn Phe Leu Lys Lys Lys Leu Arg Lys Gln Ser
 130 135 140
 His Leu Gln Tyr His Leu Leu Leu Ser Lys Ile Leu Arg Arg Lys Phe
 145 150 155 160
 Asn Gln Gly Ser Glu Arg Ser Ile His
 165

<210> 4746

<211> 182

<212> PRT

<213> Homo sapiens

<400> 4746

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Met Trp Ile Leu Arg Val Leu Leu Gly Arg His Leu Pro Gln Trp Asn
  1             5             10             15
Ala Ser Ser Glu Trp Cys Met Ala Gly Pro His Gly Gly Ser Thr Gln
      20             25             30
Gly Leu Asn Thr Gly Lys Glu Leu Ala Arg Gly Val Arg Thr Ser Gly
      35             40             45
Ile Trp Glu Ser Ala Ala Trp Asp His Lys Glu Ser Lys Ser Ser Ala
      50             55             60
Thr Cys Trp Ser Leu Arg Pro Glu Gly Arg Pro Asp Phe Arg Asp His
      65             70             75             80
Pro Trp Met Ser Leu Asp Trp Glu Leu Tyr Val Asp Gly Ser Asn Phe
      85             90             95
Val Asn Ser Gln Gly Glu Arg Cys Val Gly Tyr Ala Val Val Thr Leu
      100            105            110
Asp Ala Val Ile Glu Ala Lys Ser Leu Pro Gln Gly Thr Ser Ala Gln
      115            120            125
Lys Ala Glu Leu Ile Ala Leu Ile Arg Ala Ser Glu Leu Ser Glu Gly
      130            135            140
Lys Thr Val Asn Ile Tyr Thr Asp Ser Gln Tyr Ala Phe Leu Thr Leu
      145            150            155            160
Gln Val His Gly Ala Leu Tyr Lys Glu Lys Gly Leu Leu Asn Ser Gly
      165            170            175
Gly Lys Asp Val Lys Tyr
      180

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<210> 4747

<211> 957

<212> PRT

<213> Homo sapiens

<400> 4747

Met Thr Ser Phe Leu Lys Pro Glu Asn Ala Leu Lys Arg Ala Glu Glu
 1 5 10 15
 Leu Ile Asn Val Gly Gln Lys Gln Asp Ala Leu Gln Thr Leu His Asp
 20 25 30
 Leu Ile Thr Ser Lys Arg Tyr Arg Ala Trp Gln Lys Thr Leu Glu Arg
 35 40 45
 Ile Met Phe Lys Tyr Val Glu Leu Cys Val Asp Met Arg Lys Gly Arg
 50 55 60
 Phe Ala Lys Asp Gly Leu Ile Gln Tyr Arg Ile Ile Cys Gln Gln Val
 65 70 75 80
 Asn Val Ser Ser Leu Glu Glu Val Ile Lys His Phe Met Gln Leu Ser
 85 90 95
 Thr Glu Lys Ala Glu Gln Ala Arg Ser Gln Ala Gln Ala Leu Glu Glu
 100 105 110
 Ala Leu Asp Val Asp Asp Leu Glu Ala Asp Lys Arg Pro Glu Asp Leu
 115 120 125
 Met Leu Ser Tyr Val Ser Gly Glu Lys Gly Lys Asp Arg Ser Asp Arg
 130 135 140
 Glu Thr Val Thr Pro Trp Phe Lys Phe Leu Trp Glu Thr Tyr Arg Thr
 145 150 155 160
 Val Leu Glu Ile Leu Arg Asn Asn Ser Lys Leu Glu Ala Leu Tyr Ala
 165 170 175
 Met Thr Ala His Arg Ala Phe Gln Phe Cys Lys Gln Tyr Lys Arg Thr
 180 185 190
 Thr Glu Leu Arg Arg Leu Cys Glu Ile Ile Arg Asn His Leu Ala Asn
 195 200 205
 Leu Asn Lys Tyr Arg Asp Gln Arg Asp Arg Pro Asp Leu Ser Ala Pro
 210 215 220
 Glu Ser Leu Gln Leu Tyr Leu Asp Thr Arg Phe Glu Gln Leu Lys Ile
 225 230 235 240
 Ala Thr Glu Leu Gly Leu Trp Gln Glu Ala Phe Arg Ser Val Glu Asp
 245 250 255
 Ile His Gly Leu Met Cys Leu Val Lys Lys Thr Pro Lys Pro Ser Leu
 260 265 270

Met Val Val Tyr Tyr Val Lys Leu Thr Glu Ile Phe Trp Ile Ser Ser
 275 280 285
 Ser His Leu Tyr His Ala Tyr Ala Trp Phe Lys Leu Phe Leu Leu Gln
 290 295 300
 Lys Ser Phe Asn Lys Asn Leu Ser Gln Lys Asp Leu Gln Leu Ile Ala
 305 310 315 320
 Ser Ser Val Val Leu Ala Ala Leu Ser Val Pro Pro His Asp Arg Thr
 325 330 335
 His Gly Ala Ser His Leu Glu Leu Glu His Glu Lys Glu Arg Asn Leu
 340 345 350
 Arg Met Ala Asn Leu Ile Gly Phe Asn Leu Glu Thr Lys Pro Glu Ser
 355 360 365
 Arg Glu Met Leu Ser Arg Ala Ser Leu Leu Ala Glu Leu Ala Ser Lys
 370 375 380
 Gly Val Met Ser Cys Val Thr Gln Glu Val Lys Asp Ile Tyr His Leu
 385 390 395 400
 Leu Glu His Glu Phe Tyr Pro Ser Asp Leu Ala Leu Lys Ala Leu Pro
 405 410 415
 Leu Ile Thr Lys Ile Ser Lys Leu Gly Gly Lys Leu Ser Thr Ala Ser
 420 425 430
 Ser Val Pro Glu Val Gln Leu Ala Gln Tyr Val Pro Ala Leu Glu Arg
 435 440 445
 Leu Ala Thr Met Arg Leu Leu Gln Gln Val Ser Asn Val Tyr Gln Ser
 450 455 460
 Met Lys Ile Glu Thr Leu Ser Gly Met Ile Pro Phe Phe Asp Phe Ala
 465 470 475 480
 Gln Val Glu Lys Ile Ser Val Asp Ala Val Lys Gln Lys Phe Val Ser
 485 490 495
 Met Lys Val Asp His Met Lys Asn Ala Val Ile Phe Ser Lys Lys Ser
 500 505 510
 Leu Glu Ser Asp Gly Leu Arg Asp His Leu Gly Asn Phe Ala Glu Gln
 515 520 525
 Leu Asn Lys Ala Arg Gln Met Ile Tyr Pro Pro Asp Gly Arg Pro Ser
 530 535 540
 Lys Leu Gly Ala Leu Leu Pro Thr Leu Thr Glu Val Val Ala Lys Glu
 545 550 555 560

His Lys Arg Leu Leu Ala Arg Lys Ser Ile Ile Glu Lys Arg Lys Glu
 565 570 575
 Glu Gln Glu Arg Gln Leu Leu Glu Met Glu Arg Glu Glu Glu Ser Lys
 580 585 590
 Arg Leu Arg Leu Gln Lys Ile Thr Glu Glu Ala Glu Gln Arg Arg Leu
 595 600 605
 Ala Thr Glu Tyr Glu Gln Arg Lys Asn Gln Arg Ile Leu Arg Glu Ile
 610 615 620
 Glu Glu Arg Glu Asn Glu Glu Ala Gln Ala Leu Leu Gln Glu Ala Glu
 625 630 635 640
 Lys Arg Ile Lys Lys Lys Gly Lys Lys Pro Ile Ile Glu Gly Asp Lys
 645 650 655
 Ile Thr Lys Gln Thr Leu Met Glu Leu Thr Leu Thr Glu Gln Leu Arg
 660 665 670
 Glu Arg Gln Glu Met Glu Lys Lys Leu Gln Lys Leu Ala Lys Thr Met
 675 680 685
 Asp Tyr Leu Glu Arg Ala Lys Arg Glu Glu Ala Ala Pro Leu Ile Glu
 690 695 700
 Ala Ala Tyr Gln Gln Arg Leu Val Glu Glu Arg Leu Leu His Glu Arg
 705 710 715 720
 Glu Gln Gln Gln Glu Val Glu Leu Ser Lys Gln Arg His Glu Gly Asp
 725 730 735
 Leu Lys Glu Lys Glu Arg Leu Val Arg Met Met Gly Asn Lys Glu Val
 740 745 750
 Tyr Gln Ala Arg Val Val Ser His Arg Gln Ala Glu Phe Asn Arg Leu
 755 760 765
 Arg Arg Glu Arg Glu Glu Arg Ile Ser Arg Ile Leu Gln Ser Arg Arg
 770 775 780
 Gln Glu Arg Glu Lys Met Arg Lys Leu Lys Tyr Tyr Leu Lys Leu Glu
 785 790 795 800
 Glu Glu Arg Gln Gln Lys Leu Arg Glu Ala Glu Glu Ala Arg Lys Arg
 805 810 815
 Glu Asp Ala Glu Arg Lys Lys Lys Glu Glu Glu Glu Arg Leu Arg Lys
 820 825 830
 Leu Glu Glu Ile Ala Glu Lys Gln Arg Gln Arg Glu Arg Glu Leu Glu
 835 840 845

Glu Lys Glu Lys Gln Arg Arg Glu Ala Leu Leu Gly Arg Ala Ala Ala
 850 855 860
 Glu Pro Ala Pro Pro Ala Arg Pro Leu Glu Ser Gly Ser Ala Ala Pro
 865 870 875 880
 Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Pro Thr Pro Gly Lys Tyr Val
 885 890 895
 Pro Lys Phe Arg Arg Glu Arg Thr Glu Ser Ala Gly Ala Ala Pro Pro
 900 905 910
 Pro Glu Thr Asp Arg Trp Asn Ser Ser Ser Arg Pro Asp Gly Asp Arg
 915 920 925
 Trp Arg Ser Asp Asp Arg Arg Thr Ala Phe Gly Ser Gly Gly Gly Ser
 930 935 940
 Arg Ser Ser Ser Thr Trp Ser Ser Ser Arg Asn Ala Arg
 945 950 955

<210> 4748

<211> 177

<212> PRT

<213> Homo sapiens

<400> 4748

Met Glu Glu Asp Leu Pro Ser Lys Trp Lys Ala Lys Lys Lys Ala Gly
 1 5 10 15
 Leu Ala Ile Leu Val Ser Asp Lys Pro Asp Phe Lys Pro Thr Lys Ile
 20 25 30
 Lys Arg Asp Lys Glu Gly His Tyr Ile Val Val Lys Gly Ser Ile His
 35 40 45
 Gln Glu Asp Leu Thr Ile Leu Asn Ile Tyr Ala Pro Asn Thr Gly Ala
 50 55 60
 Pro Arg Ser Ile Lys Gln Val Leu Arg Asp Leu Arg Arg Asp Leu Asp
 65 70 75 80
 Ser His Thr Ile Ile Met Gly Asp Phe Asn Thr Pro Leu Ser Ile Leu
 85 90 95
 Asp Arg Ser Thr Arg Gln Lys Val Ile Lys Asp Ile Gln Asp Leu Asn
 100 105 110

Ser Ala Leu His Gln Ala Asp Leu Ile Asp Ile Tyr Arg Thr Leu His
 115 120 125
 His Lys Ser Arg Gln Tyr Ala Phe Phe Ser Ala Pro His Cys Thr Tyr
 130 135 140
 Ser Lys Ile Gly His Ile Ile Gly Ser Lys Thr Leu Leu Arg Lys Cys
 145 150 155 160
 Lys Arg Thr Glu Ile Thr Ala Asn Cys Leu Leu Asp Thr Val Gln Ser
 165 170 175
 Asn

<210> 4749

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4749

Met Tyr Cys Leu Lys Gln Phe Leu Pro Leu Cys Val Thr Cys Gly Leu
 1 5 10 15
 Ser Ile Val Pro Val Val Ile Ala Leu Ile Tyr Lys Cys Pro Leu Phe
 20 25 30
 Leu Ser Cys Asn Ile Phe Leu Val Thr Cys Val Thr Pro Ser Val Thr
 35 40 45
 Val His Leu Cys Ser Leu Tyr Lys His Asn Ser Ser Ser Ser Leu Cys
 50 55 60
 Pro Thr Pro Ser Leu Pro Phe Gly Phe Ala Cys Asn Val Phe Ile Cys
 65 70 75 80
 Val Arg Gln Ser Pro Thr Val Phe Leu Pro Cys Gly Ser Cys Phe Gly
 85 90 95
 Ser Leu Gln Met Ser Leu Pro Thr Ile Phe Leu Ala Ser Ser Arg Asp
 100 105 110
 His

<210> 4750

<211> 202

<212> PRT

<213> Homo sapiens

<400> 4750

```

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Ile Leu Asn Ala Asn
  1              5              10              15
Gly Leu Asn Ala Pro Ile Lys Arg His Arg Leu Thr Asn Trp Ile Lys
      20              25              30
Ser Gln Asp Pro Ser Val Cys Cys Ile Glu Glu Thr His Leu Met Cys
      35              40              45
Arg Asp Thr His Gly Leu Lys Ile Lys Gly Trp Arg Lys Ile Cys Gln
      50              55              60
Ala Asn Gly Lys Gln Lys Lys Glu Gly Val Ala Ile Leu Val Ser Asp
      65              70              75              80
Lys Thr Gly Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His
      85              90              95
Tyr Ile Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Val Leu
      100             105             110
Asn Ile Cys Ala Pro Asn Ile Gly Ala Pro Arg Phe Ile Lys Gln Val
      115             120             125
Leu Ser Asp Leu Gln Ser Asp Leu Asp Ser His Thr Ile Ile Met Gly
      130             135             140
Asp Phe Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys
      145             150             155             160
Val Asn Lys Asp Ile Gln Glu Leu Asn Thr Ala Leu His Gln Ala Asp
      165             170             175
Leu Ile Asp Ile Tyr Arg Thr Leu His Pro Thr Ser Thr Glu Tyr Thr
      180             185             190
Phe Phe Ser Ala Pro His Leu Phe Gln Asn
      195             200

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<210> 4751

<211> 512

<212> PRT

<213> Homo sapiens

<400> 4751

Met Gln Lys Leu Leu Arg Pro Ser Ser Val Pro Phe Leu Ser Ile Ser
 1 5 10 15
 Val Thr Val Ala Thr Pro Phe Leu Ser Leu Pro Pro Lys Val Ala Asn
 20 25 30
 Gln Pro Met Ser Ala Ala Ala Ala Gly Ser Ser Leu Lys Arg Gln Leu
 35 40 45
 Ser Tyr Ser Arg Tyr Leu Ala Leu Ser Ser Thr Asn Thr Cys Ser Val
 50 55 60
 Cys Arg Cys Leu Ser Leu Thr His Thr His Ser His Pro Lys Asn Asn
 65 70 75 80
 Lys Thr Leu Leu Leu Leu Asn His Ser Arg Asn Arg Ser Leu His Ser
 85 90 95
 Ala Ser Glu Gly Ser Phe Ile Thr Gln Pro Asp Pro Val Glu Tyr Gly
 100 105 110
 Ser Leu Val Asp Ser Lys Glu Lys Pro Phe Asn Ser Arg Leu Asn Arg
 115 120 125
 Arg Gln Lys Gly Ser Thr Ser Ser Ser Pro Ala Pro Ser Asn Pro Asp
 130 135 140
 Leu Leu Ala Ile Pro Gly Val Gly Pro Arg Asn Phe Arg Lys Leu Val
 145 150 155 160
 Gln Lys Gly Ile Ala Gly Val Ala Gln Leu Lys Gln Leu Tyr Lys Asp
 165 170 175
 Lys Ser Val Asp Glu Glu Glu Leu Glu Asp Asn Ser Ser Ser Ser Val
 180 185 190
 Gln Lys Lys Arg Leu Thr Phe Cys Val Glu Gly Asn Ile Ser Val Gly
 195 200 205
 Lys Thr Thr Phe Leu Gln Arg Ile Ala Asn Glu Thr Ile Glu Leu Arg
 210 215 220
 Asp Leu Val Glu Val Val Pro Glu Pro Ile Ser Lys Trp Gln Asp Val
 225 230 235 240
 Gly Pro Asp His Phe Asn Ile Leu Asp Ala Phe Tyr Ala Glu Pro Gln

	245		250		255
Arg Tyr Ala Tyr Thr Phe Gln Asn Tyr Val Phe Val Thr Arg Val Met					
	260		265		270
Gln Glu Arg Glu Ser Ser Ala Gly Ile Lys Pro Leu Arg Leu Met Glu					
	275		280		285
Arg Ser Val Phe Ser Asp Arg Met Val Phe Val Arg Ala Val His Glu					
	290		295		300
Ala Asn Trp Met Asn Gly Met Glu Ile Ser Ile Tyr Asp Ser Trp Phe					
305		310		315	320
Asp Pro Val Val Ser Ser Leu Pro Gly Leu Ile Pro Asp Gly Phe Ile					
	325		330		335
Tyr Leu Arg Ala Ser Pro Asp Thr Cys His Lys Arg Met Met Leu Arg					
	340		345		350
Lys Arg Thr Glu Glu Gly Gly Val Ser Leu Asp Tyr Leu Cys Asp Leu					
	355		360		365
His Glu Lys His Glu Ser Trp Leu Phe Pro Ser Gln Ser Gly Asn His					
	370		375		380
Gly Val Leu Ser Val Asn Gln Leu Pro His His Ile Asp Asn Ser Leu					
385		390		395	400
His Pro Asp Ile Arg Asp Arg Val Phe Tyr Leu Glu Gly Gly His Met					
	405		410		415
His Ser Ser Ile Gln Lys Val Pro Ala Leu Val Leu Asp Cys Glu Pro					
	420		425		430
Asn Ile Asp Phe Ser Lys Asp Ile Glu Ala Lys Arg Gln Tyr Ala Arg					
	435		440		445
Gln Val Ala Glu Phe Phe Glu Phe Val Lys Lys Arg Asn Glu Val Ser					
	450		455		460
Ser Lys Glu Gly Ser Ser Gln Ala Gln Pro Gln Val Leu Leu Pro His					
465		470		475	480
Glu Gly Gly Leu Trp Leu Pro Asp Gly Lys Pro Phe Pro Arg Glu Ala					
	485		490		495
Leu Lys Ser Leu Asp Phe Arg Gln Ala Ala Thr Ser Phe Met Ser Gly					
	500		505		510

<211> 277

<212> PRT

<213> Homo sapiens

<400> 4752

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Met Phe Val Cys Val Thr Ser Ile Thr Val Ile Ile Val Ser Lys Asp
  1             5             10             15
Arg Glu Phe Cys Leu His Phe Val Met Asp Gly Ser Phe Leu Cys Ser
      20             25             30
Gln Thr Gly Lys Lys Leu Met Ala Lys Cys Arg Met Leu Ile Gln Glu
      35             40             45
Asn Gln Glu Leu Gly Arg Gln Leu Ser Gln Gly Arg Ile Ala Gln Leu
      50             55             60
Glu Ala Glu Leu Ala Leu Gln Lys Lys Tyr Ser Glu Glu Leu Lys Ser
      65             70             75             80
Ser Gln Asp Glu Leu Asn Asp Phe Ile Ile Gln Leu Asp Glu Glu Val
      85             90             95
Glu Gly Met Gln Ser Thr Ile Leu Val Leu Gln Gln Gln Leu Lys Glu
      100            105            110
Thr Arg Gln Gln Leu Ala Gln Tyr Gln Gln Gln Gln Ser Gln Ala Ser
      115            120            125
Ala Pro Ser Thr Ser Arg Thr Thr Ala Ser Glu Pro Val Glu Gln Ser
      130            135            140
Glu Ala Thr Ser Lys Asp Cys Ser Arg Leu Thr Asn Gly Pro Ser Asn
      145            150            155            160
Gly Ser Ser Ser Arg Gln Arg Thr Ser Gly Ser Gly Phe His Arg Glu
      165            170            175
Gly Asn Thr Thr Glu Asp Asp Phe Pro Ser Ser Pro Gly Asn Gly Asn
      180            185            190
Lys Ser Ser Asn Ser Ser Glu Glu Arg Thr Gly Arg Gly Gly Ser Gly
      195            200            205
Tyr Val Asn Gln Leu Ser Ala Gly Tyr Glu Ser Val Asp Ser Pro Thr
      210            215            220
Gly Ser Glu Asn Ser Leu Thr His Gln Ser Asn Asp Thr Asp Ser Ser
      225            230            235            240
His Asp Pro Gln Glu Glu Lys Ala Val Ser Gly Lys Gly Asn Arg Thr

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245 250 255
 Val Gly Ser Arg His Val Gln Asn Gly Leu Asp Ser Ser Val Asn Val
 260 265 270
 Gln Gly Ser Val Leu
 275

<210> 4753

<211> 528

<212> PRT

<213> Homo sapiens

<400> 4753

Met Ala Val Gly Gln Leu Val Pro Ser Asn Leu Phe Leu Asn His Ser
 1 5 10 15
 Ala Ala Thr Thr Leu Ile Pro Thr Ser Thr Pro Pro Arg His Arg His
 20 25 30
 Leu Leu Cys Ile Ser Ser Ala Asn His Thr Thr Ala Thr Asp Asn Asp
 35 40 45
 Ser Pro Phe Pro Ser Phe Gly Arg Val Lys Thr Leu Leu Val His Arg
 50 55 60
 Arg Arg Lys Asp Gln Ser His Arg Arg Ala Val Gln Leu Glu Asp Asp
 65 70 75 80
 Asn Asp Asp Asp Ile Ala Pro Arg Pro Arg Arg Ser Gln Ser Arg Ser
 85 90 95
 Arg Gly Gly Glu Arg Trp Asp Met Ile Pro Asn Tyr Thr Pro Gln Ser
 100 105 110
 Lys Ser Ala Thr Asp Thr Lys Phe Phe Ser Leu Lys Ser Phe Lys Glu
 115 120 125
 Ile Gly Cys Ser Glu Tyr Met Ile Glu Ser Leu Gln Lys Leu Leu Leu
 130 135 140
 Ser Arg Pro Ser His Val Gln Ala Met Ala Phe Ala Pro Val Ile Ser
 145 150 155 160
 Gly Lys Thr Cys Val Ile Ala Asp Gln Ser Gly Ser Gly Lys Thr Leu
 165 170 175
 Ala Tyr Leu Ala Pro Ile Ile Gln Leu Leu Arg Leu Glu Glu Leu Glu

180	185	190
Gly Arg Ser Ser Lys Ser Ser Ser Gln Ala Pro Arg Val Leu Val Leu		
195	200	205
Ala Pro Thr Ala Glu Leu Ala Ser Gln Val Leu Asp Asn Cys Arg Ser		
210	215	220
Leu Ser Lys Ser Gly Val Pro Phe Lys Ser Met Val Val Thr Gly Gly		
225	230	235
Phe Arg Gln Lys Thr Gln Leu Glu Asn Leu Gln Gln Gly Val Asp Val		
245	250	255
Leu Ile Ala Thr Pro Gly Arg Phe Leu Phe Leu Ile His Glu Gly Phe		
260	265	270
Leu Gln Leu Thr Asn Leu Arg Cys Ala Ile Leu Asp Glu Val Asp Ile		
275	280	285
Leu Phe Gly Asp Glu Asp Phe Glu Val Ala Leu Gln Ser Leu Ile Asn		
290	295	300
Ser Ser Pro Val Asp Thr Gln Tyr Leu Phe Val Thr Ala Thr Leu Pro		
305	310	315
Lys Asn Val Tyr Thr Lys Leu Val Glu Val Phe Pro Asp Cys Glu Met		
325	330	335
Ile Met Gly Pro Gly Met His Arg Ile Ser Ser Arg Leu Gln Glu Ile		
340	345	350
Ile Val Asp Cys Ser Gly Glu Asp Gly Gln Glu Lys Thr Pro Asp Thr		
355	360	365
Ala Phe Leu Asn Lys Lys Thr Ala Leu Leu Gln Leu Val Glu Glu Asn		
370	375	380
Pro Val Pro Arg Thr Ile Val Phe Cys Asn Lys Ile Glu Thr Cys Arg		
385	390	395
Lys Val Glu Asn Leu Leu Lys Arg Phe Asp Arg Lys Gly Asn His Val		
405	410	415
Gln Val Leu Pro Phe His Ala Ala Met Thr Gln Glu Ser Arg Leu Ala		
420	425	430
Ser Met Glu Glu Phe Thr Arg Ser Pro Ser Lys Gly Val Ser Gln Phe		
435	440	445
Met Val Cys Thr Asp Arg Ala Ser Arg Gly Ile Asp Phe Thr Arg Val		
450	455	460
Asp His Val Ile Leu Phe Asp Phe Pro Arg Asp Pro Ser Glu Tyr Val		

465 470 475 480
 Arg Arg Val Gly Arg Thr Ala Arg Gly Ala Lys Gly Val Gly Lys Ala
 485 490 495
 Phe Ile Phe Val Val Gly Lys Gln Val Ser Leu Ala Arg Lys Ile Met
 500 505 510
 Glu Arg Asn Gln Lys Gly His Pro Leu His Asp Val Pro Ser Ala Tyr

 515 520 525

<210> 4754

<211> 238

<212> PRT

<213> Homo sapiens

<400> 4754

Met Cys Gly Leu Ser Phe Met Leu Phe Arg Ala Cys Leu Lys Met Asp
 1 5 10 15
 Leu Gly Val Phe Ile Cys Val Phe Ile Ser Phe Ser Pro Leu Phe Lys
 20 25 30
 Ser Thr Ala Asp Cys Pro Asp Ala Val Pro Ser Ser Ala Glu Thr Gly
 35 40 45
 Gly Thr Asn Tyr Leu Ala Pro Gly Gly Leu Ser Asp Ser Gln Leu Leu
 50 55 60
 Leu Glu Pro Gly Asp Arg Ser His Trp Cys Val Val Ala Tyr Trp Glu
 65 70 75 80
 Glu Lys Thr Arg Val Gly Arg Leu Tyr Cys Val Gln Glu Pro Ser Leu
 85 90 95
 Asp Ile Phe Tyr Asp Leu Pro Gln Gly Asn Gly Phe Cys Leu Gly Gln
 100 105 110
 Leu Asn Ser Asp Asn Lys Ser Gln Leu Val Gln Lys Val Arg Ser Lys
 115 120 125
 Ile Gly Cys Gly Ile Gln Leu Thr Arg Glu Val Asp Gly Val Trp Val
 130 135 140
 Tyr Asn Arg Ser Ser Tyr Pro Ile Phe Ile Lys Ser Ala Thr Leu Asp
 145 150 155 160

Asn Pro Asp Ser Arg Thr Leu Leu Val His Lys Val Phe Pro Gly Phe
 165 170 175
 Ser Ile Lys Ala Phe Asp Tyr Glu Lys Ala Tyr Ser Leu Gln Arg Pro
 180 185 190
 Asn Asp His Glu Phe Met Gln Gln Pro Trp Thr Gly Phe Thr Val Gln
 195 200 205
 Ile Ser Phe Val Lys Gly Trp Gly Gln Cys Tyr Thr Arg Gln Phe Ile
 210 215 220
 Ser Ser Cys Pro Cys Trp Leu Glu Val Ile Phe Asn Ser Arg
 225 230 235

<210> 4755

<211> 307

<212> PRT

<213> Homo sapiens

<400> 4755

Met Gln Ala Leu Ser Thr Val Pro Leu Asp Trp Val Thr Val Pro Lys
 1 5 10 15
 Leu Gln Glu Cys Gly Ala Arg Pro Ala Met Glu Lys Pro Thr Arg Val
 20 25 30
 Val Gly Gly Phe Gly Ala Ala Ser Gly Glu Val Pro Trp Gln Val Ser
 35 40 45
 Leu Lys Glu Gly Ser Arg His Phe Cys Gly Ala Thr Val Val Gly Asp
 50 55 60
 Arg Trp Leu Leu Ser Ala Ala His Cys Phe Asn His Thr Lys Val Glu
 65 70 75 80
 Gln Val Arg Ala His Leu Gly Thr Ala Ser Leu Leu Gly Leu Gly Gly
 85 90 95
 Ser Pro Val Lys Ile Gly Leu Arg Arg Val Val Leu His Pro Leu Tyr
 100 105 110
 Asn Pro Gly Ile Leu Asp Phe Asp Leu Ala Val Leu Glu Leu Ala Ser
 115 120 125
 Pro Leu Ala Phe Asn Lys Tyr Ile Gln Pro Val Cys Leu Pro Leu Ala
 130 135 140

Ile Gln Lys Phe Pro Val Gly Arg Lys Cys Met Ile Ser Gly Trp Gly
 145 150 155 160
 Asn Thr Gln Glu Gly Asn Ala Thr Lys Pro Glu Leu Leu Gln Lys Ala
 165 170 175
 Ser Val Gly Ile Ile Asp Gln Lys Pro Cys Ser Val Leu Tyr Asn Phe
 180 185 190
 Ser Leu Thr Asp Arg Met Ile Cys Ala Gly Phe Leu Glu Gly Lys Val
 195 200 205
 Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Ala Cys Glu Glu Ala
 210 215 220
 Pro Gly Val Phe Tyr Leu Ala Gly Ile Val Ser Trp Gly Ile Gly Cys
 225 230 235 240
 Ala Gln Val Lys Lys Pro Gly Val Tyr Thr Arg Ile Thr Arg Leu Lys
 245 250 255
 Gly Trp Ile Leu Glu Ile Met Ser Ser Gln Pro Leu Pro Met Ser Pro
 260 265 270
 Pro Ser Thr Thr Arg Met Leu Ala Thr Thr Ser Pro Arg Thr Thr Ala
 275 280 285
 Gly Leu Thr Val Pro Gly Ala Thr Pro Ser Arg Pro Thr Pro Gly Leu
 290 295 300
 Pro Ala Gly
 305

<210> 4756

<211> 583

<212> PRT

<213> Homo sapiens

<400> 4756

Met Ser Val Ile Val Lys Thr Gln Glu Gly Asp Ile Leu Leu Phe Cys
 1 5 10 15
 Lys Gly Ala Asp Ser Ala Val Phe Pro Arg Val Gln Asn His Glu Ile
 20 25 30
 Glu Leu Thr Lys Val His Val Glu Arg Asn Ala Met Asp Gly Tyr Arg
 35 40 45

Thr Leu Cys Val Ala Phe Lys Glu Ile Ala Pro Asp Asp Tyr Glu Arg
 50 55 60
 Ile Asn Arg Gln Leu Ile Glu Ala Lys Met Ala Leu Gln Asp Arg Glu
 65 70 75 80
 Glu Lys Met Glu Lys Val Phe Asp Asp Ile Glu Thr Asn Met Asn Leu
 85 90 95
 Ile Gly Ala Thr Ala Val Glu Asp Lys Leu Gln Asp Gln Ala Ala Glu
 100 105 110
 Thr Ile Glu Ala Leu His Ala Ala Gly Leu Lys Val Trp Val Leu Thr
 115 120 125
 Gly Asp Lys Met Glu Thr Ala Lys Ser Thr Cys Tyr Ala Cys Arg Leu
 130 135 140
 Phe Gln Thr Asn Thr Glu Leu Leu Glu Leu Thr Thr Lys Thr Ile Glu
 145 150 155 160
 Glu Ser Glu Arg Lys Glu Asp Arg Leu His Glu Leu Leu Ile Glu Tyr
 165 170 175
 Arg Lys Lys Leu Leu His Glu Phe Pro Lys Ser Thr Arg Ser Phe Lys
 180 185 190
 Lys Ala Trp Thr Glu His Gln Glu Tyr Gly Leu Ile Ile Asp Gly Ser
 195 200 205
 Thr Leu Ser Leu Ile Leu Asn Ser Ser Gln Asp Ser Ser Ser Asn Asn
 210 215 220
 Tyr Lys Ser Ile Phe Leu Gln Ile Cys Met Lys Cys Thr Ala Val Leu
 225 230 235 240
 Cys Cys Arg Met Ala Pro Leu Gln Lys Ala Gln Ile Val Arg Met Val
 245 250 255
 Lys Asn Leu Lys Gly Ser Pro Ile Thr Leu Ser Ile Gly Asp Gly Ala
 260 265 270
 Asn Asp Val Ser Met Ile Leu Glu Ser His Val Gly Ile Gly Ile Lys
 275 280 285
 Gly Lys Glu Gly Arg Gln Ala Ala Arg Asn Ser Asp Tyr Ser Val Pro
 290 295 300
 Lys Phe Lys His Leu Lys Lys Leu Leu Leu Ala His Gly His Leu Tyr
 305 310 315 320
 Tyr Val Arg Ile Ala His Leu Val Gln Tyr Phe Phe Tyr Lys Asn Leu
 325 330 335

Cys Phe Ile Leu Pro Gln Phe Leu Tyr Gln Phe Phe Cys Gly Phe Ser
 340 345 350
 Gln Gln Pro Leu Tyr Asp Ala Ala Tyr Leu Thr Met Tyr Asn Ile Cys
 355 360 365
 Phe Thr Ser Leu Pro Ile Leu Ala Tyr Ser Leu Leu Glu Gln His Ile
 370 375 380
 Asn Ile Asp Thr Leu Thr Ser Asp Pro Arg Leu Tyr Met Lys Ile Ser
 385 390 395 400
 Gly Asn Ala Met Leu Gln Leu Gly Pro Phe Leu Tyr Trp Thr Phe Leu
 405 410 415
 Ala Ala Phe Glu Gly Thr Val Phe Phe Phe Gly Thr Tyr Phe Leu Phe
 420 425 430
 Gln Thr Ala Ser Leu Glu Glu Asn Gly Lys Val Tyr Gly Asn Trp Thr
 435 440 445
 Phe Gly Thr Ile Val Phe Thr Val Leu Val Phe Thr Val Thr Leu Lys
 450 455 460
 Leu Ala Leu Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile
 465 470 475 480
 Trp Gly Ser Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly
 485 490 495
 Ile Ile Trp Pro Phe Leu Lys Gln Gln Arg Met Tyr Phe Val Phe Ala
 500 505 510
 Gln Met Leu Ser Ser Val Ser Thr Trp Leu Ala Ile Ile Leu Leu Ile
 515 520 525
 Phe Ile Ser Leu Phe Pro Glu Ile Leu Leu Ile Val Leu Lys Asn Val
 530 535 540
 Arg Arg Arg Ser Ala Arg Arg Asn Leu Ser Cys Arg Arg Ala Ser Asp
 545 550 555 560
 Ser Leu Ser Ala Arg Pro Ser Val Arg Pro Leu Leu Leu Arg Thr Phe
 565 570 575
 Ser Asp Glu Ser Asn Val Leu
 580

<210> 4757

<211> 171

<212> PRT

<213> Homo sapiens

<400> 4757

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Met His Leu Trp Arg Tyr Pro Ser Leu Ser Ile His Gly Ile Glu Gly
  1             5             10             15
Ala Phe Asp Glu Pro Gly Thr Lys Thr Val Ile Pro Gly Arg Val Ile
      20             25             30
Gly Lys Phe Ser Ile Arg Leu Val Pro His Met Asn Val Ser Ala Val
      35             40             45
Glu Lys Gln Val Thr Arg His Leu Glu Asp Val Phe Ser Lys Arg Asn
      50             55             60
Ser Ser Asn Lys Met Val Val Ser Met Thr Leu Gly Leu His Pro Trp
      65             70             75             80
Ile Ala Asn Ile Asp Asp Thr Gln Tyr Leu Ala Ala Lys Arg Ala Ile
      85             90             95
Arg Thr Val Phe Gly Thr Glu Pro Asp Met Ile Arg Asp Gly Ser Thr
      100            105            110
Ile Pro Ile Ala Lys Met Phe Gln Glu Ile Val His Lys Ser Val Val

      115            120            125
Leu Ile Pro Leu Gly Ala Val Asp Asp Gly Glu His Ser Gln Asn Glu
      130            135            140
Lys Ile Asn Arg Ser Ala Asp Ala Cys Ala Met Cys Leu Ser Leu Leu
      145            150            155            160
Pro Leu Leu His Thr Pro Gly Ser Thr Arg Gly
      165            170

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<210> 4758

<211> 446

<212> PRT

<213> Homo sapiens

<400> 4758

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Met Leu Gly Gly Val Val Glu Leu Ala Ala Ala Ser Ser Phe Pro Leu

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1	5	10	15
Leu Glu Gln Phe Ala Gly Asp Gly Phe His Ala Asp Gly Asp Asp Val			
20	25	30	
Leu Thr Glu Leu Cys Ala Pro Asp Gly Ala Pro Pro Gly Val Val Pro			
35	40	45	
Val Leu Ser Ala His Ser Pro Ser Leu Gly Ser Glu Tyr Phe Ile Arg			
50	55	60	
Leu Glu Glu Ala Ala Pro Ala Thr Gly His Asp Pro Asp Cys Ala Gly			
65	70	75	80
Cys Ala Pro Ser Pro Pro Ala Ile Ala Asp Gln Asp Asp Asp Ser Asp			
85	90	95	
Gly Ser Thr Ala Ala Ser Leu Ala Met Glu Pro Leu Leu Gly His Gly			
100	105	110	
Pro Pro Val Asp Val Pro Trp Gly Arg Gly Asp His Tyr Pro Arg Arg			
115	120	125	
Ser Leu Ala Arg Asp Pro Leu Cys Pro Ser Arg Ser Pro Ser Pro Ser			
130	135	140	
Ala Gly Pro Leu Ser Leu Ala Glu Gly Gly Ala Glu Asp Ala Asp Trp			
145	150	155	160
Gly Val Ala Ala Phe Cys Pro Ala Phe Phe Glu Asp Pro Leu Gly Thr			
165	170	175	
Ser Pro Leu Gly Ser Ser Gly Ala Pro Pro Leu Pro Leu Thr Gly Glu			
180	185	190	
Asp Glu Leu Glu Glu Val Gly Ala Arg Arg Ala Ala Gln Arg Gly His			
195	200	205	
Trp Arg Ser Asn Val Ser Ala Asn Asn Asn Ser Gly Ser Arg Cys Pro			
210	215	220	
Glu Ser Trp Asp Pro Val Ser Ala Gly Gly His Ala Glu Gly Cys Pro			
225	230	235	240
Ser Pro Lys Gln Thr Pro Arg Ala Ser Pro Glu Pro Gly Tyr Pro Gly			
245	250	255	
Glu Pro Leu Leu Gly Leu Gln Ala Ala Ser Ala Gln Glu Pro Gly Cys			
260	265	270	
Cys Pro Gly Leu Pro His Leu Cys Ser Ala Gln Gly Leu Ala Pro Ala			
275	280	285	
Pro Cys Leu Val Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly			

290 295 300
 Asp His Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr
 305 310 315 320
 Thr Gly Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu
 325 330 335
 Gly Ala Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp
 340 345 350
 Ala Leu Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala
 355 360 365
 Ile Lys Leu Ala Ser Ala Leu Asn Gly Ser Ser Ser Ser Pro Glu Val
 370 375 380
 Glu Ala Pro Ser Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly
 385 390 395 400
 Ile Phe Thr Asp Thr Ser Ser Asp Gly Leu Gln Ala Arg Arg Pro Asp
 405 410 415
 Val Val Pro Ala Phe Arg Ser Leu Gln Lys Gln Trp Pro Gln Arg Glu
 420 425 430
 Glu Ser Leu Pro Arg Leu Cys Leu Leu Leu Arg Pro Arg Gly
 435 440 445

<210> 4759

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4759

Met Val Thr Lys Ala Thr Phe His Gln Lys Thr Gln Cys Trp Ala Cys
 1 5 10 15
 Glu Glu Gly Val Gln Gln Ser Phe His Cys Pro Cys Arg Leu Gln Ala
 20 25 30
 Ala Ala Ser Val Glu Arg Tyr Thr Glu Leu Leu Lys Glu Phe Leu Phe
 35 40 45
 Lys Val Gln Ser Ser Asp Trp Met Pro Cys Trp Ile Pro Leu Leu Pro
 50 55 60
 Gln Ala Leu Ile Thr Leu Ser Ser Cys Ser Leu Gly Lys Cys Thr Phe

65 70 75 80
 Tyr Thr Asn Val Arg Gln Phe Pro Gln Leu Pro Leu Leu Asp Ile Lys
 85 90 95
 Glu Phe Thr Phe Leu Thr Ile Phe Gln Ser
 100 105

<210> 4760

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4760

Met Tyr Leu Leu Ile Met Glu Phe Met Ser Phe Pro Ser Phe Ala Trp
 1 5 10 15
 Pro Arg Phe Phe Phe Ser Leu Lys Phe Leu Leu Arg Cys Tyr Leu Gly
 20 25 30
 Cys Leu His Tyr Lys Gln Ala Ala Leu Pro Pro Leu Phe Val Val Thr
 35 40 45
 Gly Glu Lys Pro Tyr Lys Cys Thr Trp Glu Gly Cys Asp Trp Arg Phe
 50 55 60
 Ala Arg Ser Asp Glu Leu Thr Arg His Tyr Arg Lys His Thr Gly Ala
 65 70 75 80
 Lys Pro Phe Gln Cys Gly Val Cys Asn Arg Ser Phe Ser Arg Ser Asp
 85 90 95
 His Leu Ala Leu His Met Lys Arg His Gln Asn
 100 105

<210> 4761

<211> 667

<212> PRT

<213> Homo sapiens

<400> 4761

Met Glu Asp Leu Ser Ser Pro Asp Ser Thr Leu Leu Gln Gly Gly His

1	5	10	15
Asn Leu Leu Ser Ser Ala Ser Phe Gln Glu Ala Val Thr Phe Lys Asp			
20	25	30	
Val Ile Val Asp Phe Thr Gln Glu Trp Lys Gln Leu Asp Pro Gly			
35	40	45	
Gln Arg Asp Leu Phe Arg Asp Val Thr Leu Glu Asn Tyr Thr His Leu			
50	55	60	
Val Ser Ile Gly Leu Gln Val Ser Lys Pro Asp Val Ile Ser Gln Leu			
65	70	75	80
Glu Gln Gly Thr Glu Pro Trp Ile Met Glu Pro Ser Ile Pro Val Gly			
85	90	95	
Thr Cys Ala Asp Trp Glu Thr Arg Leu Glu Asn Ser Val Ser Ala Pro			
100	105	110	
Glu Pro Asp Ile Ser Glu Glu Glu Leu Ser Pro Glu Val Ile Val Glu			
115	120	125	
Lys His Lys Arg Asp Asp Ser Trp Ser Ser Asn Leu Leu Glu Ser Trp			
130	135	140	
Glu Tyr Glu Gly Ser Leu Glu Arg Gln Gln Ala Asn Gln Gln Thr Leu			
145	150	155	160
Pro Lys Glu Ile Lys Val Thr Glu Lys Thr Ile Pro Ser Trp Glu Lys			
165	170	175	
Gly Pro Val Asn Asn Glu Phe Gly Lys Ser Val Asn Val Ser Ser Asn			
180	185	190	
Leu Val Thr Gln Glu Pro Ser Pro Glu Glu Thr Ser Thr Lys Arg Ser			
195	200	205	
Ile Lys Gln Asn Ser Asn Pro Val Lys Lys Glu Lys Ser Cys Lys Cys			
210	215	220	
Asn Glu Cys Gly Lys Ala Phe Ser Tyr Cys Ser Ala Leu Ile Arg His			
225	230	235	240
Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Glu			
245	250	255	
Lys Ala Phe Ser Arg Ser Glu Asn Leu Ile Asn His Gln Arg Ile His			
260	265	270	
Thr Gly Asp Lys Pro Tyr Lys Cys Asp Gln Cys Gly Lys Gly Phe Ile			
275	280	285	

Glu Gly Pro Ser Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys
 290 295 300
 Pro Tyr Lys Cys Asp Glu Cys Gly Lys Ala Phe Ser Gln Arg Thr His
 305 310 315 320
 Leu Val Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Thr Cys
 325 330 335
 Asn Glu Cys Gly Lys Ala Phe Ser Gln Arg Gly His Phe Met Glu His
 340 345 350
 Gln Lys Ile His Thr Gly Glu Lys Pro Phe Lys Cys Asp Glu Cys Asp
 355 360 365
 Lys Thr Phe Thr Arg Ser Thr His Leu Thr Gln His Gln Lys Ile His
 370 375 380
 Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn
 385 390 395 400
 Gly Pro Ser Thr Phe Ile Arg His His Met Ile His Thr Gly Glu Lys
 405 410 415
 Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln His Ser Asn
 420 425 430
 Leu Thr Gln His Gln Lys Thr His Thr Gln Glu Lys Ala Tyr Glu Cys
 435 440 445
 Lys Glu Cys Gly Lys Ala Phe Ile Arg Ser Ser Ser Leu Ala Lys His
 450 455 460
 Glu Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys His Glu Cys Gly
 465 470 475 480
 Lys Thr Phe Ser Tyr Gly Ser Ser Leu Ile Gln His Arg Lys Ile His
 485 490 495
 Thr Gly Glu Arg Pro Tyr Lys Cys Asn Glu Cys Gly Arg Ala Phe Asn
 500 505 510
 Gln Asn Ile His Leu Thr Gln His Lys Arg Ile His Thr Gly Ala Lys
 515 520 525
 Pro Tyr Glu Cys Ala Glu Cys Gly Lys Ala Phe Arg His Cys Ser Ser
 530 535 540
 Leu Ala Gln His Gln Lys Thr His Thr Glu Glu Lys Pro Tyr Gln Cys
 545 550 555 560
 Asn Lys Cys Glu Lys Thr Phe Ser Gln Ser Ser His Leu Thr Gln His
 565 570 575

Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Asp
 580 585 590
 Lys Ala Phe Ser Arg Ser Thr His Leu Thr Glu His Gln Asn Thr His
 595 600 605
 Thr Gly Glu Lys Pro Tyr Asn Cys Asn Glu Cys Arg Lys Thr Phe Ser
 610 615 620
 Gln Ser Thr Tyr Leu Ile Gln His Gln Arg Ile His Ser Gly Glu Lys
 625 630 635 640
 Pro Phe Gly Cys Asn Asp Cys Gly Lys Ser Phe Arg Tyr Arg Ser Ala
 645 650 655
 Leu Asn Lys His Gln Arg Leu His Pro Gly Ile
 660 665

<210> 4762

<211> 460

<212> PRT

<213> Homo sapiens

<400> 4762

Met Glu Val Leu Glu Ser Gly Glu Gln Gly Val Leu Gln Trp Asp Arg
 1 5 10 15
 Lys Leu Ser Glu Leu Ser Glu Pro Gly Asp Gly Glu Ala Leu Met Tyr
 20 25 30
 His Thr His Phe Ser Glu Leu Leu Asp Glu Phe Ser Gln Asn Val Leu
 35 40 45
 Gly Gln Leu Leu Asn Asp Pro Phe Leu Ser Glu Lys Ser Val Ser Met
 50 55 60
 Glu Val Glu Pro Ser Pro Thr Ser Pro Ala Pro Leu Ile Gln Ala Glu
 65 70 75 80
 His Ser Tyr Ser Leu Cys Glu Glu Pro Arg Ala Gln Ser Pro Phe Thr
 85 90 95
 His Ile Thr Thr Ser Asp Ser Phe Asn Asp Asp Glu Val Glu Ser Glu
 100 105 110
 Lys Trp Tyr Leu Ser Thr Asp Phe Pro Ser Thr Ser Ile Lys Thr Glu
 115 120 125

Pro Val Thr Asp Glu Pro Pro Pro Gly Leu Val Pro Ser Val Thr Leu
 130 135 140
 Thr Ile Thr Ala Ile Ser Thr Pro Leu Glu Lys Glu Glu Pro Pro Leu
 145 150 155 160
 Glu Met Asn Thr Gly Val Asp Ser Ser Cys Gln Thr Ile Ile Pro Lys
 165 170 175
 Ile Lys Leu Glu Pro His Glu Val Asp Gln Phe Leu Asn Phe Ser Pro
 180 185 190
 Lys Glu Ala Pro Val Asp His Leu His Leu Pro Pro Thr Pro Pro Ser
 195 200 205
 Ser His Gly Ser Asp Ser Glu Gly Ser Leu Ser Pro Asn Pro Arg Leu
 210 215 220
 His Pro Phe Ser Leu Pro Gln Thr His Ser Pro Ser Arg Ala Ala Pro
 225 230 235 240
 Arg Ala Pro Ser Ala Leu Ser Ser Ser Pro Leu Leu Thr Ala Pro His
 245 250 255
 Lys Leu Gln Gly Ser Gly Pro Leu Val Leu Thr Glu Glu Glu Lys Arg
 260 265 270
 Thr Leu Ile Ala Glu Gly Tyr Pro Ile Pro Thr Lys Leu Pro Leu Ser
 275 280 285
 Lys Ser Glu Glu Lys Ala Leu Lys Lys Ile Arg Arg Lys Ile Lys Asn
 290 295 300
 Lys Ile Ser Ala Gln Glu Ser Arg Arg Lys Lys Lys Glu Tyr Met Asp
 305 310 315 320
 Ser Leu Glu Lys Lys Val Glu Ser Cys Ser Thr Glu Asn Leu Glu Leu
 325 330 335
 Arg Lys Lys Val Glu Val Leu Glu Asn Thr Asn Arg Thr Leu Leu Gln
 340 345 350
 Gln Leu Gln Lys Leu Gln Thr Leu Val Met Gly Lys Val Ser Arg Thr
 355 360 365
 Cys Lys Leu Ala Gly Thr Gln Thr Gly Thr Cys Leu Met Val Val Val
 370 375 380
 Leu Cys Phe Ala Val Ala Phe Gly Ser Phe Phe Gln Gly Tyr Gly Pro
 385 390 395 400
 Tyr Pro Ser Ala Thr Lys Met Ala Leu Pro Ser Gln His Ser Leu Gln
 405 410 415

Glu	Pro	Tyr	Thr	Ala	Ser	Val	Gly	Lys	Thr	Ala	Cys	Gly	Lys	Leu	Gly
420							425				430				
Arg	Val	Leu	Phe	Tyr	Phe	Pro	Arg	Ala	Gly	Phe	Leu	Ser	Leu	Pro	Lys
435							440				445				
Gly	Ile	Phe	Cys	Glu	Ser	Pro	Met	Phe	Lys	Lys	Trp				
450							455				460				

<210> 4763

<211> 443

<212> PRT

<213> Homo sapiens

<400> 4763

Met	Glu	His	Val	Gln	Gly	Arg	Ile	Phe	Arg	Asp	Leu	Thr	Ile	Pro	Gly
1				5					10					15	
Leu	Ser	Pro	Ala	Glu	Arg	Ser	Ala	Ile	Tyr	Val	Ala	Thr	Val	Glu	Thr
			20					25					30		
Leu	Ala	Gln	Leu	His	Ser	Leu	Asn	Ile	Gln	Ser	Leu	Gln	Leu	Glu	Gly
			35				40					45			
Tyr	Gly	Ile	Gly	Ala	Gly	Tyr	Cys	Lys	Arg	Gln	Val	Ser	Thr	Trp	Thr
	50					55					60				
Lys	Gln	Tyr	Gln	Ala	Ala	Ala	His	Gln	Asp	Ile	Pro	Ala	Met	Gln	Gln
	65				70				75					80	
Leu	Ser	Glu	Trp	Leu	Met	Lys	Asn	Leu	Pro	Asp	Asn	Asp	Asn	Glu	Glu
				85					90					95	
Asn	Leu	Ile	His	Gly	Asp	Phe	Arg	Leu	Asp	Asn	Ile	Val	Phe	His	Pro
		100						105				110			
Lys	Glu	Cys	Arg	Val	Ile	Ala	Val	Leu	Asp	Trp	Glu	Leu	Ser	Thr	Ile
		115						120				125			
Gly	His	Pro	Leu	Ser	Asp	Leu	Ala	His	Phe	Ser	Leu	Phe	Tyr	Phe	Trp
	130					135					140				
Pro	Arg	Thr	Val	Pro	Met	Ile	Asn	Gln	Gly	Ser	Tyr	Ser	Glu	Asn	Ser
	145				150					155				160	
Gly	Ile	Pro	Ser	Met	Glu	Glu	Leu	Ile	Ser	Ile	Tyr	Cys	Arg	Cys	Arg
				165					170					175	

Gly Ile Asn Ser Ile Leu Pro Asn Trp Asn Phe Phe Leu Ala Leu Ser
 180 185 190
 Tyr Phe Lys Met Ala Gly Ile Ala Gln Gly Val Tyr Ser Arg Tyr Leu
 195 200 205
 Leu Gly Asn Asn Ser Ser Glu Asp Ser Phe Leu Phe Ala Asn Ile Val
 210 215 220
 Gln Pro Leu Ala Glu Thr Gly Leu Gln Leu Ser Lys Arg Thr Phe Ser
 225 230 235 240
 Thr Val Leu Pro Gln Ile Asp Thr Thr Gly Gln Leu Phe Val Gln Thr
 245 250 255
 Arg Lys Gly Gln Glu Val Leu Ile Lys Val Lys His Phe Met Lys Gln
 260 265 270
 His Ile Leu Pro Ala Glu Lys Glu Val Thr Glu Phe Tyr Val Gln Asn
 275 280 285
 Glu Asn Ser Val Asp Lys Trp Gly Lys Pro Leu Val Ile Asp Lys Leu
 290 295 300
 Lys Glu Met Ala Lys Val Glu Gly Leu Trp Asn Leu Phe Leu Pro Ala
 305 310 315 320
 Val Ser Gly Leu Ser His Val Asp Tyr Ala Leu Ile Ala Glu Glu Thr
 325 330 335
 Gly Lys Cys Phe Phe Ala Pro Asp Val Phe Asn Cys Gln Ala Pro Asp
 340 345 350
 Thr Gly Asn Met Glu Val Leu His Leu Tyr Gly Ser Glu Glu Gln Lys
 355 360 365
 Lys Gln Trp Leu Glu Pro Leu Leu Gln Gly Asn Ile Thr Ser Cys Phe
 370 375 380
 Cys Met Thr Glu Pro Asp Val Ala Ser Ser Asp Ala Thr Asn Ile Glu
 385 390 395 400
 Cys Ser Ile Gln Arg Asp Glu Asp Ser Tyr Val Ile Asn Gly Lys Lys
 405 410 415
 Trp Trp Ser Ser Gly Ala Gly Asn Pro Lys Cys Lys Ile Ala Ile Val
 420 425 430
 Leu Gly Arg Thr Gln Asn Thr Ser Leu Ser Arg
 435 440

<210> 4764

<211> 370

<212> PRT

<213> Homo sapiens

<400> 4764

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Met Met Thr Pro Gln Val Ile Thr Pro Gln Gln Met Gln Gln Ile Leu
  1              5              10              15
Gln Gln Gln Val Leu Ser Pro Gln Gln Leu Gln Ala Leu Leu Gln Gln
      20              25              30
Gln Gln Ala Val Met Leu Gln Gln Asp Phe Leu Asp Ser Gly Leu Glu
      35              40              45
Asn Phe Arg Ala Ala Leu Glu Lys Asn Gln Gln Leu Gln Glu Phe Tyr
      50              55              60
Lys Lys Gln Gln Glu Gln Leu His Leu Gln Leu Leu Gln Gln Gln Gln
      65              70              75              80
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
      85              90              95
Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
      100             105             110
Gln Gln Gln Gln His Pro Gly Lys Gln Ala Lys Glu Gln Gln Gln Gln
      115             120             125
Gln Gln Gln Gln Gln Gln Leu Ala Ala Gln Gln Leu Val Phe Gln Gln
      130             135             140
Gln Leu Leu Gln Met Gln Gln Leu Gln Gln Gln Gln His Leu Leu Ser
      145             150             155             160
Leu Gln Arg Gln Gly Leu Ile Ser Ile Pro Pro Gly Gln Ala Ala Leu
      165             170             175
Pro Val Gln Ser Leu Pro Gln Ala Gly Leu Ser Pro Ala Glu Ile Gln
      180             185             190
Gln Leu Trp Lys Glu Val Thr Gly Val His Ser Met Glu Asp Asn Gly
      195             200             205
Ile Lys His Gly Gly Leu Asp Leu Thr Thr Asn Asn Ser Ser Ser Thr
      210             215             220
Thr Ser Ser Asn Thr Ser Lys Ala Ser Pro Pro Ile Thr His His Ser
      225             230             235             240

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Ile Val Asn Gly Gln Ser Ser Val Leu Ser Ala Arg Arg Asp Ser Ser
 245 250 255
 Ser His Glu Glu Thr Gly Ala Ser His Thr Leu Tyr Gly His Gly Val
 260 265 270
 Cys Lys Trp Pro Gly Cys Glu Ser Ile Cys Glu Asp Phe Gly Gln Phe
 275 280 285
 Leu Lys His Leu Asn Asn Glu His Ala Leu Asp Asp Arg Ser Thr Ala
 290 295 300
 Gln Cys Arg Val Gln Met Gln Val Val Gln Gln Leu Glu Ile Gln Leu
 305 310 315 320
 Ser Lys Glu Arg Glu Arg Leu Gln Ala Met Met Thr His Leu His Met
 325 330 335
 Arg Pro Ser Glu Pro Lys Pro Ser Pro Lys Pro Lys Leu Pro Gln Thr
 340 345 350
 Met Asn Phe Ile Lys Met Gln Met Ser Asp Leu His Leu Leu Met Gln
 355 360 365
 Leu Ser
 370

<210> 4765

<211> 379

<212> PRT

<213> Homo sapiens

<400> 4765

Met Ser Arg Gly Tyr Ser Glu Asn Asn Asn Phe Leu Asn Asn Asn Asn
 1 5 10 15
 Gln Met Val Leu Asp Met Ile Leu Tyr Pro Leu Ile Gly Ile Pro Gln
 20 25 30
 Thr Ile Asn Trp Glu Thr Ile Ala Arg Leu Val Pro Gly Leu Thr Pro
 35 40 45
 Lys Glu Cys Ala Lys Arg Phe Asp Glu Leu Lys Ser Ser Gly Ser Ser
 50 55 60
 Pro Val Asp Asn Gln Tyr Asn Ser Leu Met Ala Ala Gly Glu Ser Pro
 65 70 75 80

Val	Glu	Thr	Leu	Ala	Thr	Tyr	Ile	Lys	Ser	Ser	Leu	Leu	Asp	Ile	His
				85				90				95			
Gly	Glu	Phe	Gln	Glu	Thr	Pro	Val	Gly	His	Asp	Ala	Val	Ser	Lys	Thr
				100				105				110			
Gly	Arg	His	Ser	Ile	Ala	Ser	Thr	Arg	Asn	Cys	Ser	Ser	Glu	Ser	Glu
				115				120				125			
Asn	Cys	Thr	Thr	His	Asn	Gly	Gly	Glu	Met	Thr	Glu	Glu	Ser	Glu	Gly
				130				135				140			
Pro	Asn	Met	Val	Ile	His	Val	Cys	Asp	Glu	Ala	Lys	Asn	Leu	Lys	Glu
145				150				155				160			
Asp	Phe	Thr	Cys	Pro	Arg	Asp	Leu	Leu	Ile	Ser	Glu	Met	Lys	Tyr	Phe
				165				170				175			
Ala	Glu	Tyr	Leu	Ser	Met	Asp	Ala	Gln	Arg	Trp	Glu	Glu	Val	Asp	Ile
				180				185				190			
Ser	Val	His	Cys	Asp	Val	His	Ile	Phe	Asn	Trp	Leu	Ile	Lys	Tyr	Ile
				195				200				205			
Lys	Arg	Asn	Thr	Lys	Glu	Asn	Lys	Asp	Cys	Glu	Met	Pro	Thr	Leu	Glu
				210				215				220			
Pro	Gly	Asn	Val	Ile	Ser	Ile	Leu	Ile	Ser	Ser	Glu	Phe	Leu	Lys	Met
225				230				235				240			
Asp	Ser	Leu	Val	Glu	Gln	Cys	Ile	Gln	Tyr	Cys	His	Lys	Asn	Met	Asn
				245				250				255			
Ala	Ile	Val	Ala	Thr	Pro	Cys	Asn	Met	Asn	Cys	Ile	Asn	Ala	Asn	Leu
				260				265				270			
Leu	Thr	Arg	Ile	Ala	Asp	Leu	Phe	Ser	His	Asn	Glu	Val	Asp	Asp	Leu
				275				280				285			
Lys	Asp	Lys	Lys	Asp	Lys	Phe	Lys	Ser	Lys	Leu	Phe	Cys	Lys	Lys	Ile
				290				295				300			
Glu	Arg	Leu	Phe	Asp	Pro	Glu	Tyr	Leu	Asn	Pro	Asp	Ser	Arg	Ser	Asn
305				310				315				320			
Ala	Ala	Thr	Leu	Tyr	Arg	Cys	Cys	Leu	Cys	Lys	Lys	Leu	Leu	Thr	Lys
				325				330				335			
Glu	Thr	Glu	Arg	Arg	Ile	Pro	Cys	Ile	Pro	Gly	Lys	Ile	Asn	Val	Asp
				340				345				350			
Arg	Arg	Gly	Asn	Ile	Val	Tyr	Ile	His	Ile	Arg	Cys	Arg	Glu	Asp	Lys
355				360				365							

Ile His Thr Cys Ile Phe Val Tyr Ile Tyr Ile
 370 375

<210> 4766

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4766

Met His Lys Tyr Ile Leu Ile Val Lys Asp Leu Asn Pro Thr Glu Pro
 1 5 10 15
 Pro Gln Cys Val Gly Ile Phe Pro Pro Leu Ser Pro Ile His Ala Ser
 20 25 30
 Leu Leu Tyr Pro Leu Pro Pro Cys Ser Gly Pro Pro Cys Pro Leu Ser
 35 40 45
 Ser Cys Trp Val Cys Cys Trp Glu Ser Ala Gly Asp Arg Lys Asp Arg
 50 55 60
 Gly Glu Arg Gly Gln Gly Thr Asn Phe Pro Ser Pro Pro Leu Gln Ser
 65 70 75 80
 His Gly Pro Ala Ala Phe Leu Tyr Gln Arg Phe Gln Leu Leu Pro Gly
 85 90 95
 Gly Val Pro Lys Ser Ser Phe Ser Leu Gly His His Ala Ser Leu Pro
 100 105 110
 Pro Ser Gln Pro Lys Ala Ser His Gly Ala His Arg Phe Leu Ser Arg
 115 120 125
 Val Leu Ser Ile Met Phe Leu Cys Ile Leu Ser Met Leu Tyr Asn Trp
 130 135 140
 Ser Phe Ile Lys Phe Cys Leu Asn Gly Pro Ile
 145 150 155

<210> 4767

<211> 421

<212> PRT

<213> Homo sapiens

<400> 4767

Met Met Tyr Arg Thr Val Gly Phe Gly Thr Arg Ser Arg Asn Leu Lys
 1 5 10 15
 Pro Trp Met Ile Ala Val Leu Ile Val Leu Ser Leu Thr Val Val Ala
 20 25 30
 Val Thr Ile Gly Leu Leu Val His Phe Leu Val Phe Asp Gln Lys Lys
 35 40 45
 Glu Tyr Tyr His Gly Ser Phe Lys Ile Leu Asp Pro Gln Ile Asn Asn
 50 55 60
 Asn Phe Gly Gln Ser Asn Thr Tyr Gln Leu Lys Asp Leu Arg Glu Thr
 65 70 75 80
 Thr Glu Asn Leu Val Ser Gln Val Asp Glu Ile Phe Ile Asp Ser Ala
 85 90 95
 Trp Lys Lys Asn Tyr Ile Lys Asn Gln Val Val Arg Leu Thr Pro Glu
 100 105 110
 Glu Asp Gly Val Lys Val Asp Val Ile Met Val Phe Gln Phe Pro Ser
 115 120 125
 Thr Glu Gln Arg Ala Val Arg Glu Lys Lys Ile Gln Ser Ile Leu Asn
 130 135 140
 Gln Lys Ile Arg Asn Leu Arg Ala Leu Pro Ile Asn Ala Ser Ser Val
 145 150 155 160
 Gln Val Asn Ala Met Ser Ser Ser Thr Gly Glu Leu Thr Val Gln Ala
 165 170 175
 Ser Cys Gly Lys Arg Val Val Pro Leu Asn Val Asn Arg Ile Ala Ser
 180 185 190
 Gly Val Ile Ala Pro Lys Ala Ala Trp Pro Trp Gln Ala Ser Leu Gln
 195 200 205
 Tyr Asp Asn Ile His Gln Cys Gly Ala Thr Leu Ile Ser Asn Thr Trp
 210 215 220
 Leu Val Thr Ala Ala His Cys Phe Gln Lys Tyr Lys Asn Pro His Gln
 225 230 235 240
 Trp Thr Val Ser Phe Gly Thr Lys Ile Asn Pro Pro Leu Met Lys Arg
 245 250 255
 Asn Val Arg Arg Phe Ile Ile His Glu Lys Tyr Arg Ser Ala Ala Arg
 260 265 270

Glu	Tyr	Asp	Ile	Ala	Val	Val	Gln	Val	Ser	Ser	Arg	Val	Thr	Phe	Ser		
275						280						285					
Asp	Asp	Ile	Arg	Arg	Ile	Cys	Leu	Pro	Glu	Ala	Ser	Ala	Ser	Phe	Gln		
290						295						300					
Pro	Asn	Leu	Thr	Val	His	Ile	Thr	Gly	Phe	Gly	Ala	Leu	Tyr	Tyr	Gly		
305						310						315				320	
Gly	Glu	Ser	Gln	Asn	Asp	Leu	Arg	Glu	Ala	Arg	Val	Lys	Ile	Ile	Ser		
325						330						335					
Asp	Asp	Val	Cys	Lys	Gln	Pro	Gln	Val	Tyr	Gly	Asn	Asp	Ile	Lys	Pro		
340						345						350					
Gly	Met	Phe	Cys	Ala	Gly	Tyr	Met	Glu	Gly	Ile	Tyr	Asp	Ala	Cys	Arg		
355						360						365					
Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Thr	Arg	Asp	Leu	Lys	Asp	Thr	Trp		
370						375						380					
Tyr	Leu	Ile	Gly	Ile	Val	Ser	Trp	Gly	Asp	Asn	Cys	Gly	Gln	Lys	Asp		
385						390						395				400	
Lys	Pro	Gly	Val	Tyr	Thr	Gln	Val	Thr	Tyr	Tyr	Arg	Asn	Trp	Ile	Ala		
405						410						415					
Ser	Lys	Thr	Gly	Ile													
420																	

<210> 4768

<211> 495

<212> PRT

<213> Homo sapiens

<400> 4768

Met	Ala	Ala	Glu	Pro	Gln	Pro	Ser	Ser	Leu	Ser	Tyr	Arg	Thr	Thr	Gly
1				5					10					15	
Ser	Thr	Tyr	Leu	His	Pro	Leu	Ser	Glu	Leu	Leu	Gly	Ile	Pro	Leu	Asp
			20					25					30		
Gln	Val	Asn	Phe	Val	Val	Cys	Gln	Leu	Val	Ala	Leu	Phe	Ala	Ala	Phe
		35					40					45			
Trp	Phe	Arg	Ile	Tyr	Leu	Arg	Pro	Gly	Thr	Thr	Ser	Ser	Asp	Val	Arg
	50					55					60				

His Ala Val Ala Thr Ile Phe Gly Ile Tyr Phe Val Ile Phe Cys Phe
 65 70 75 80
 Gly Trp Tyr Ser Val His Leu Phe Val Leu Val Leu Met Cys Tyr Ala
 85 90 95
 Ile Met Val Thr Ala Ser Val Ser Asn Ile His Arg Tyr Ser Phe Phe
 100 105 110
 Val Ala Met Gly Tyr Leu Thr Ile Cys His Ile Ser Arg Ile Tyr Ile
 115 120 125
 Phe His Tyr Gly Ile Leu Thr Thr Asp Phe Ser Gly Pro Leu Met Ile
 130 135 140
 Val Thr Gln Lys Ile Thr Thr Leu Ala Phe Gln Val His Asp Gly Leu
 145 150 155 160
 Gly Arg Arg Ala Glu Asp Leu Ser Ala Glu Gln His Arg Leu Ala Ile
 165 170 175
 Lys Val Lys Pro Ser Phe Leu Glu Tyr Leu Ser Tyr Leu Leu Asn Phe
 180 185 190
 Met Ser Val Ile Ala Gly Pro Cys Asn Asn Phe Lys Asp Tyr Ile Ala
 195 200 205
 Phe Ile Glu Gly Lys His Ile His Met Lys Leu Leu Glu Val Asn Trp
 210 215 220
 Lys Arg Lys Gly Phe His Ser Leu Pro Glu Pro Ser Pro Thr Gly Ala
 225 230 235 240
 Val Ile His Lys Leu Gly Ile Thr Leu Val Ser Leu Leu Leu Phe Leu
 245 250 255
 Thr Leu Thr Lys Thr Phe Pro Val Thr Cys Leu Val Asp Asp Trp Phe
 260 265 270
 Val His Lys Ala Ser Phe Pro Ala Arg Leu Cys Tyr Leu Tyr Val Val
 275 280 285
 Met Gln Ala Ser Lys Pro Lys Tyr Tyr Phe Ala Trp Thr Leu Ala Asp
 290 295 300
 Ala Val Asn Asn Ala Ala Gly Phe Gly Phe Ser Gly Val Asp Lys Asn
 305 310 315 320
 Gly Asn Phe Cys Trp Asp Leu Leu Ser Asn Leu Asn Ile Trp Lys Ile
 325 330 335
 Glu Thr Ala Thr Ser Phe Lys Met Tyr Leu Glu Asn Trp Asn Ile Gln
 340 345 350

Thr Ala Thr Trp Leu Lys Cys Val Cys Tyr Gln Arg Val Pro Trp Tyr
 355 360 365
 Pro Thr Val Leu Thr Phe Ile Leu Ser Ala Leu Trp His Gly Val Tyr
 370 375 380
 Pro Gly Tyr Tyr Phe Thr Phe Leu Thr Gly Ile Leu Val Thr Leu Ala
 385 390 395 400
 Ala Arg Ala Val Arg Asn Asn Tyr Arg His Tyr Phe Leu Ser Ser Arg
 405 410 415
 Ala Leu Lys Ala Val Tyr Asp Ala Gly Thr Trp Ala Val Thr Gln Leu
 420 425 430
 Ala Val Ser Tyr Thr Val Ala Pro Phe Val Met Leu Ala Val Glu Pro
 435 440 445
 Thr Ile Ser Leu Tyr Lys Ser Met Tyr Phe Tyr Leu His Ile Ile Ser
 450 455 460
 Leu Leu Ile Ile Leu Phe Leu Pro Met Lys Pro Gln Ala His Thr Gln
 465 470 475 480
 Arg Arg Pro Gln Thr Leu Asn Ser Ile Asn Lys Arg Lys Thr Asp
 485 490 495

<210> 4769

<211> 953

<212> PRT

<213> Homo sapiens

<400> 4769

Met Cys Asn Pro Glu Glu Ala Ala Leu Leu Arg Leu Glu Glu Val Phe
 1 5 10 15
 Ser Ala Thr Leu Ala His Val Asn Ser Leu Val Leu Gln Pro Leu Leu
 20 25 30
 Pro Ala Ala Pro Asp Pro Ser Asp Pro Trp Gly Arg Glu Cys Leu Arg
 35 40 45
 Leu Leu Gln Gln Leu His Lys Ser Ser Gln Gln Leu Trp Glu Val Thr
 50 55 60
 Glu Glu Ser Leu His Ser Leu Gln Glu Arg Leu Arg Tyr Pro Asp Ser

65	70	75	80
Thr Gly Leu Glu Ser Leu Leu Leu Leu Arg Gly Ala Asp Arg Val Leu			
	85	90	95
Gln Ala His Ile Glu Tyr Ile Glu Ser Tyr Thr Ser Cys Met Val Val			
	100	105	110
Gln Ala Phe Gln Lys Ala Ala Lys Arg Arg Ser Glu Tyr Trp Arg Gly			
	115	120	125
Gln Arg Lys Ala Leu Arg Gln Leu Leu Ser Gly Val Ser Ser Glu Gly			
	130	135	140
Ser Val Gly Ala Ser Leu Gly Gln Ala Leu His Gln Pro Leu Ala His			
145	150	155	160
His Val Gln Gln Tyr Val Leu Leu Leu Leu Ser Pro Gly Asp Thr Ile			
	165	170	175
Gly Glu His His Pro Thr Arg Glu Leu Val Val Asn Ala Val Thr Leu			
	180	185	190
Phe Gly Asn Leu Gln Ser Phe Met Lys Gln Glu Leu Asp Gln Ala Val			
	195	200	205
Ala Thr Gln Ala Leu Trp His Thr Leu Arg Gly Arg Leu Arg Asp Val			
	210	215	220
Leu Cys Thr Pro Ala His Arg Leu Leu Gln Asp Ser Gln Asp Val Pro			
225	230	235	240
Val Thr Val Ala Pro Leu Arg Ala Glu Arg Val Leu Leu Phe Asp Asp			
	245	250	255
Ala Leu Val Leu Leu Gln Gly His Asn Val His Thr Phe Asp Leu Lys			
	260	265	270
Leu Val Trp Val Asp Pro Gly Gln Asp Gly Cys Thr Phe His Leu Leu			
	275	280	285
Thr Pro Glu Glu Glu Phe Ser Phe Cys Ala Lys Asp Ser Gln Gly Gln			
	290	295	300
Ala Val Trp Gln Trp Lys Val Thr Trp Ala Val His Gln Ala Leu His			
305	310	315	320
Gly Lys Lys Asp Phe Pro Val Leu Gly Ala Gly Leu Glu Pro Ser Gln			
	325	330	335
Pro Pro Asp Cys Arg Cys Ala Glu Tyr Thr Phe Gln Ala Glu Gly Arg			
	340	345	350
Leu Cys Gln Ala Thr Tyr Glu Gly Glu Trp Cys Arg Gly Arg Pro His			

355	360	365
Gly Lys Gly Thr Leu Lys Trp Pro Asp Gly Arg Asn His Val Gly Asn		
370	375	380
Phe Cys Gln Gly Leu Glu His Gly Phe Gly Ile Arg Leu Leu Pro Gln		
385	390	395
Ala Ser Glu Asp Lys Phe Asp Cys Tyr Lys Cys His Trp Arg Glu Gly		
405	410	415
Ser Met Cys Gly Tyr Gly Ile Cys Glu Tyr Ser Thr Asp Gly Val Tyr		
420	425	430
Lys Gly Tyr Phe Gln Glu Gly Leu Arg His Gly Phe Gly Val Leu Glu		
435	440	445
Ser Gly Pro Gln Ala Pro Gln Pro Phe Arg Tyr Thr Gly His Trp Glu		
450	455	460
Arg Gly Gln Arg Ser Gly Tyr Gly Ile Glu Glu Asp Gly Asp Arg Gly		
465	470	475
Glu Arg Tyr Ile Gly Met Trp Gln Ala Gly Gln Arg His Gly Pro Gly		
485	490	495
Val Met Val Thr Gln Ala Gly Val Cys Tyr Gln Gly Thr Phe Gln Ala		
500	505	510
Asp Lys Thr Val Gly Pro Gly Ile Leu Leu Ser Glu Asp Asp Ser Leu		
515	520	525
Tyr Glu Gly Thr Phe Thr Arg Asp Leu Thr Leu Met Gly Lys Gly Lys		
530	535	540
Val Thr Phe Pro Asn Gly Phe Thr Leu Glu Gly Ser Phe Gly Ser Gly		
545	550	555
Ala Gly Arg Gly Leu His Thr Gln Gly Val Leu Asp Thr Ala Ala Leu		
565	570	575
Pro Pro Asp Pro Ser Ser Thr Cys Lys Arg Gln Leu Gly Val Gly Ala		
580	585	590
Phe Pro Val Glu Ser Arg Trp Gln Gly Val Tyr Ser Pro Phe Arg Asp		
595	600	605
Phe Val Cys Ala Gly Cys Pro Arg Asp Leu Gln Glu Ala Leu Leu Gly		
610	615	620
Phe Asp Val Gln Ser Ser Arg Glu Leu Arg Arg Ser Gln Asp Tyr Leu		
625	630	635
Ser Cys Glu Arg Thr His Pro Glu Asp Ser Val Gly Ser Met Glu Asp		

	645		650		655										
Ile	Leu	Glu	Glu	Leu	Leu	Gln	His	Arg	Glu	Pro	Lys	Ala	Leu	Gln	Leu
	660		665		670										
Tyr	Leu	Arg	Lys	Ala	Leu	Ser	Asn	Ser	Leu	His	Pro	Leu	Gly	Lys	Leu
	675		680		685										
Leu	Arg	Thr	Leu	Met	Leu	Thr	Phe	Gln	Ala	Thr	Tyr	Ala	Gly	Val	Gly
	690		695		700										
Ala	Asn	Lys	His	Leu	Gln	Glu	Leu	Ala	Gln	Glu	Glu	Val	Lys	Gln	His
705			710		715										
Ala	Gln	Glu	Leu	Trp	Ala	Ala	Tyr	Arg	Gly	Leu	Leu	Arg	Val	Ala	Leu
	725		730		735										
Glu	Arg	Lys	Gly	Gln	Ala	Leu	Glu	Glu	Asp	Glu	Asp	Thr	Glu	Thr	Arg
	740		745		750										
Asp	Leu	Gln	Val	His	Gly	Leu	Val	Leu	Pro	Leu	Met	Leu	Pro	Ser	Phe
	755		760		765										
Tyr	Ser	Glu	Leu	Phe	Thr	Leu	Tyr	Leu	Leu	Leu	His	Glu	Arg	Glu	Asp
	770		775		780										
Ser	Phe	Tyr	Ser	Gln	Gly	Ile	Ala	Asn	Leu	Ser	Leu	Phe	Pro	Asp	Thr
785			790		795										
Gln	Leu	Leu	Glu	Phe	Leu	Asp	Val	Gln	Lys	His	Leu	Trp	Pro	Leu	Lys
	805		810		815										
Asp	Leu	Thr	Leu	Thr	Ser	Asn	Gln	Arg	Tyr	Ser	Leu	Val	Arg	Asp	Lys
	820		825		830										
Cys	Phe	Leu	Ser	Ala	Thr	Glu	Cys	Leu	Gln	Lys	Ile	Met	Thr	Thr	Val
	835		840		845										
Asp	Pro	Arg	Glu	Lys	Leu	Glu	Val	Leu	Glu	Arg	Thr	Tyr	Gly	Glu	Ile
	850		855		860										
Glu	Gly	Thr	Val	Ser	Arg	Val	Leu	Gly	Arg	Glu	Tyr	Lys	Leu	Pro	Met
865			870		875										
Asp	Asp	Leu	Leu	Pro	Leu	Leu	Ile	Tyr	Val	Val	Ser	His	Ala	Arg	Ile
	885		890		895										
Gln	His	Leu	Gly	Ala	Glu	Ile	His	Leu	Ile	Arg	Asp	Met	Met	Asp	Pro
	900		905		910										
Asn	His	Thr	Gly	Gly	Leu	Tyr	Asp	Phe	Leu	Leu	Thr	Ala	Leu	Glu	Ser
	915		920		925										
Cys	Tyr	Glu	His	Ile	Gln	Lys	Glu	Asp	Met	Arg	Leu	His	Arg	Leu	Pro

930 935 940
 Gly His Trp His Ser Arg Glu Leu Trp
 945 950

<210> 4770

<211> 331

<212> PRT

<213> Homo sapiens

<400> 4770

Met Asn Val Lys Asn Val Gly Lys Leu Asn Gln Ser Ser Asp Leu Leu
 1 5 10 15
 Arg His His Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asn Lys
 20 25 30
 Cys Gly Glu Ser Phe Arg Ser Ser Ser Asp Leu Ile Lys His His Arg
 35 40 45
 Val His Thr Gly Glu Lys Pro His Glu Cys Ser Glu Cys Gly Lys Val
 50 55 60
 Phe Ser Gln Arg Ser His Leu Val Thr His Gln Lys Ile His Thr Gly
 65 70 75 80
 Glu Lys Pro Tyr Gln Cys Thr Glu Cys Glu Lys Ala Phe Arg Arg Arg
 85 90 95
 Ser Leu Leu Ile Gln Arg Arg Arg Ile His Ser Gly Glu Lys Pro Cys
 100 105 110
 Glu Cys Lys Glu Cys Gly Lys Leu Phe Met Trp His Thr Ala Phe Leu
 115 120 125
 Lys His Gln Arg Leu His Ala Gly Glu Lys Leu Glu Glu Cys Glu Lys
 130 135 140
 Thr Phe Ser Lys Asp Glu Glu Leu Arg Gly Glu Gln Lys Ile His Gln
 145 150 155 160
 Glu Glu Lys Ala Tyr Trp Cys Asn Gln Cys Gly Arg Ala Phe Gln Gly
 165 170 175
 Ser Ser Asp Leu Ile Gly His Gln Val Thr His Thr Gly Glu Lys Pro
 180 185 190
 Tyr Glu Cys Lys Glu Cys Gly Lys Thr Phe Asn Gln Ser Ser Asp Leu

195	200	205
Leu Arg His His Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asn		
210	215	220
Lys Cys Gly Lys Ser Phe Arg Gly Ser Ser Asp Leu Ile Arg His His		
225	230	235
Arg Val His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Trp Lys		
245	250	255
Ala Phe Ser Gln Asn Ser His Leu Val Ser His Gln Arg Ile His Thr		
260	265	270
Arg Glu Lys Pro Phe Glu Cys Ser Asn Cys Gly Lys Ala Phe Ser Gly		
275	280	285
Trp Thr Ala Phe Leu Lys His Gln Lys Leu His Ile Gly Lys Glu Phe		
290	295	300
Glu Asp Cys Lys Ser Leu Gln Thr Gly Pro Ile Leu Ile Gly Ser Arg		
305	310	315
Asn Leu Met Asn Ala Val Lys Leu Gly Lys Val		
325	330	

<210> 4771

<211> 1099

<212> PRT

<213> Homo sapiens

<400> 4771

Met Ala His Leu Gly Pro Thr Pro Pro Pro His Ser Leu Asn Tyr Lys
1 5 10 15
Ser Glu Asp Arg Leu Ser Glu Gln Asp Trp Pro Ala Tyr Phe Lys Val
20 25 30
Pro Cys Cys Gly Val Asp Thr Ser Gln Ile Glu Ser Glu Glu Ala Glu
35 40 45
Val Asp Val Arg Glu Arg Glu Thr Gln Arg Asp Arg Glu Pro Lys Arg
50 55 60
Ala Arg Asp Leu Thr Leu Arg Asp Ser Cys Thr Asp Asn Ser Met Gln
65 70 75 80
Phe Gly Thr Arg Thr Thr Thr Ala Glu Pro Gly Phe Met Gly Thr Trp

	85		90		95
Gln Asn Ala Asp Thr Asn Leu Leu Phe Arg Met Ser Gln Gln Ala Ile					
	100		105		110
Arg Cys Thr Leu Val Asn Cys Thr Cys Glu Cys Phe Gln Pro Gly Lys					
	115		120		125
Ile Asn Leu Arg Thr Cys Asp Gln Cys Lys His Gly Trp Val Ala His					
	130		135		140
Ala Leu Asp Lys Leu Ser Thr Gln His Leu Tyr His Pro Thr Gln Val					
145		150		155	160
Glu Ile Val Gln Ser Asn Val Val Phe Asp Ile Ser Ser Leu Met Leu					
	165		170		175
Tyr Gly Thr Gln Ala Val Pro Val Arg Leu Lys Ile Leu Leu Asp Arg					
	180		185		190
Leu Phe Ser Val Leu Lys Gln Glu Glu Val Leu His Ile Leu His Gly					
	195		200		205
Leu Gly Trp Thr Leu Arg Asp Tyr Val Arg Gly Tyr Ile Leu Gln Asp					
	210		215		220
Ala Ala Gly Lys Val Leu Asp Arg Trp Ala Ile Met Ser Arg Glu Glu					
225		230		235	240
Glu Ile Ile Thr Leu Gln Gln Phe Leu Arg Phe Gly Glu Thr Lys Ser					
	245		250		255
Ile Val Glu Leu Met Ala Ile Gln Glu Lys Glu Gly Gln Ala Val Ala					
	260		265		270
Val Pro Ser Ser Lys Thr Asp Ser Asp Ile Arg Thr Phe Ile Glu Ser					
	275		280		285
Asn Asn Arg Thr Arg Ser Pro Ser Leu Leu Ala His Leu Glu Asn Ser					
	290		295		300
Asn Pro Ser Ser Ile His His Phe Glu Asn Ile Pro Asn Ser Leu Ala					
305		310		315	320
Phe Leu Leu Pro Phe Gln Tyr Ile Asn Pro Val Ser Ala Pro Leu Leu					
	325		330		335
Gly Leu Pro Pro Asn Gly Leu Leu Leu Glu Gln Pro Gly Leu Arg Leu					
	340		345		350
Arg Glu Pro Ser Leu Ser Thr Gln Asn Glu Tyr Asn Glu Ser Ser Glu					
	355		360		365

Ser Glu Val Ser Pro Thr Pro Tyr Lys Asn Asp Gln Thr Pro Asn Arg
 370 375 380
 Asn Ala Leu Thr Ser Ile Thr Asn Val Glu Pro Lys Thr Glu Pro Ala
 385 390 395 400
 Cys Val Ser Pro Ile Gln Asn Ser Ala Pro Val Ser Asp Leu Thr Lys
 405 410 415
 Thr Glu His Pro Lys Ser Ser Phe Arg Ile His Arg Met Arg Arg Met
 420 425 430
 Gly Ser Ala Ser Arg Lys Gly Arg Val Phe Cys Asn Ala Cys Gly Lys
 435 440 445
 Thr Phe Tyr Asp Lys Gly Thr Leu Lys Ile His Tyr Asn Ala Val His
 450 455 460
 Leu Lys Ile Lys His Arg Cys Thr Ile Glu Gly Cys Asn Met Val Phe
 465 470 475 480
 Ser Ser Leu Arg Ser Arg Asn Arg His Ser Ala Asn Pro Asn Pro Arg
 485 490 495
 Leu His Met Pro Met Leu Arg Asn Asn Arg Asp Lys Asp Leu Ile Arg
 500 505 510
 Ala Thr Ser Gly Ala Ala Thr Pro Val Ile Ala Ser Thr Lys Ser Asn
 515 520 525
 Leu Ala Leu Thr Ser Pro Gly Arg Pro Pro Met Gly Phe Thr Thr Pro
 530 535 540
 Pro Leu Asp Pro Val Leu Gln Asn Pro Leu Pro Ser Gln Leu Val Phe
 545 550 555 560
 Ser Gly Leu Lys Thr Val Gln Pro Val Pro Pro Phe Tyr Arg Ser Leu
 565 570 575
 Leu Thr Pro Gly Glu Met Val Ser Pro Pro Thr Ser Leu Pro Thr Ser
 580 585 590
 Pro Ile Ile Pro Thr Ser Gly Thr Ile Glu Gln His Pro Pro Pro Pro
 595 600 605
 Ser Glu Pro Val Val Pro Ala Val Met Met Ala Thr His Glu Pro Ser
 610 615 620
 Ala Asp Leu Ala Pro Lys Lys Lys Pro Arg Lys Ser Ser Met Pro Val
 625 630 635 640
 Lys Ile Glu Lys Glu Ile Ile Asp Thr Ala Asp Glu Phe Asp Asp Glu
 645 650 655

Asp Asp Asp Pro Asn Asp Gly Gly Ala Val Val Asn Asp Met Ser His
 660 665 670
 Asp Asn His Cys His Ser Gln Glu Glu Met Ser Pro Gly Met Ser Val
 675 680 685
 Lys Asp Phe Ser Lys His Asn Arg Thr Arg Cys Ile Ser Arg Thr Glu
 690 695 700
 Ile Arg Arg Ala Asp Ser Met Thr Ser Glu Asp Gln Glu Pro Glu Arg
 705 710 715 720
 Asp Tyr Glu Asn Glu Ser Glu Ser Ser Glu Pro Lys Leu Gly Glu Glu
 725 730 735
 Ser Met Glu Gly Asp Glu His Ile His Ser Glu Val Ser Glu Lys Val
 740 745 750
 Leu Met Asn Ser Glu Arg Pro Asp Glu Asn His Ser Glu Pro Ser His
 755 760 765
 Gln Asp Val Ile Lys Val Lys Glu Glu Phe Thr Asp Pro Thr Tyr Asp
 770 775 780
 Met Phe Tyr Met Ser Gln Tyr Gly Leu Tyr Asn Gly Gly Gly Ala Ser
 785 790 795 800
 Met Ala Ala Leu His Glu Ser Phe Thr Ser Ser Leu Asn Tyr Gly Ser
 805 810 815
 Pro Gln Lys Phe Ser Pro Glu Gly Asp Leu Cys Ser Ser Pro Asp Pro
 820 825 830
 Lys Ile Cys Tyr Val Cys Lys Lys Ser Phe Lys Ser Ser Tyr Ser Val
 835 840 845
 Lys Leu His Tyr Arg Asn Val His Leu Lys Glu Met His Val Cys Thr
 850 855 860
 Val Ala Gly Cys Asn Ala Ala Phe Pro Ser Arg Arg Ser Arg Asp Arg
 865 870 875 880
 His Ser Ala Asn Ile Asn Leu His Arg Lys Leu Leu Thr Lys Glu Leu
 885 890 895
 Asp Asp Met Gly Leu Asp Ser Ser Gln Pro Ser Leu Ser Lys Asp Leu
 900 905 910
 Arg Asp Glu Phe Leu Val Lys Ile Tyr Gly Ala Gln His Pro Met Gly
 915 920 925
 Leu Asp Val Arg Glu Asp Ala Ser Ser Pro Ala Gly Thr Glu Asp Ser
 930 935 940

His Leu Asn Gly Tyr Gly Arg Gly Met Ala Glu Asp Tyr Met Val Leu
 945 950 955 960
 Asp Leu Ser Thr Thr Ser Ser Leu Gln Ser Ser Ser Ser Ile His Ser
 965 970 975
 Ser Arg Glu Ser Asp Ala Gly Ser Asp Glu Gly Ile Leu Leu Asp Asp
 980 985 990
 Ile Asp Gly Ala Ser Asp Ser Gly Glu Ser Ala His Lys Ala Glu Ala
 995 1000 1005
 Pro Ala Leu Pro Gly Ser Leu Gly Ala Glu Val Ser Gly Ser Leu Met
 1010 1015 1020
 Phe Ser Ser Leu Ser Gly Ser Asn Gly Gly Ile Met Cys Asn Ile Cys
 1025 1030 1035 1040
 His Lys Met Tyr Ser Asn Lys Gly Thr Leu Arg Val His Tyr Lys Thr
 1045 1050 1055
 Val His Leu Arg Glu Met His Lys Cys Lys Val Pro Gly Cys Asn Met
 1060 1065 1070
 Met Phe Ser Ser Val Arg Ser Arg Asn Arg His Ser Gln Asn Pro Asn
 1075 1080 1085
 Leu His Lys Asn Ile Pro Phe Thr Ser Val Asp
 1090 1095

<210> 4772

<211> 247

<212> PRT

<213> Homo sapiens

<400> 4772

Met Gly Gly Ala Gly Arg Gly Val Gly Glu Gly Arg Gly Arg Gly Gly
 1 5 10 15
 Gly Gly Arg Arg Trp Arg Ala Val Met Ala Ala Gly Asp Gly Asp Val
 20 25 30
 Lys Leu Gly Thr Leu Gly Ser Gly Ser Glu Ser Ser Asn Asp Gly Gly
 35 40 45
 Ser Glu Ser Pro Gly Asp Ala Gly Ala Ala Ala Glu Gly Gly Gly Trp
 50 55 60

Ala Ala Ala Ala Leu Ala Leu Leu Thr Gly Gly Gly Glu Met Leu Leu
 65 70 75 80
 Asn Val Ala Leu Val Ala Leu Val Leu Leu Gly Ala Tyr Arg Leu Trp
 85 90 95
 Val Arg Trp Gly Arg Arg Gly Leu Gly Ala Gly Ala Gly Ala Gly Glu
 100 105 110
 Glu Ser Pro Ala Thr Ser Leu Pro Arg Met Lys Lys Arg Asp Phe Ser
 115 120 125
 Leu Glu Gln Leu Arg Gln Tyr Asp Gly Ser Arg Asn Pro Arg Ile Leu
 130 135 140
 Leu Ala Val Asn Gly Lys Val Phe Asp Val Thr Lys Gly Ser Lys Phe
 145 150 155 160
 Tyr Gly Pro Ala Gly Pro Tyr Gly Ile Phe Ala Gly Arg Asp Ala Ser
 165 170 175
 Arg Gly Leu Ala Thr Phe Cys Leu Asp Lys Asp Ala Leu Arg Asp Glu
 180 185 190
 Tyr Asp Asp Leu Ser Asp Leu Asn Ala Val Gln Met Glu Ser Val Arg
 195 200 205
 Glu Trp Glu Met Gln Phe Lys Glu Lys Tyr Asp Tyr Val Gly Arg Leu
 210 215 220
 Leu Lys Pro Gly Glu Glu Pro Ser Glu Tyr Thr Asp Glu Glu Asp Thr
 225 230 235 240
 Lys Asp His Asn Lys Gln Asp
 245

<210> 4773

<211> 705

<212> PRT

<213> Homo sapiens

<400> 4773

Met Lys Gln Glu Leu Asp Gln Ala Val Ala Thr Gln Ala Leu Trp His
 1 5 10 15
 Thr Leu Arg Gly Arg Leu Arg Asp Val Leu Cys Thr Pro Ala His Arg
 20 25 30

Leu Leu Gln Asp Ser Gln Asp Val Pro Val Thr Val Ala Pro Leu Arg
 35 40 45
 Ala Glu Arg Val Leu Leu Phe Asp Asp Ala Leu Val Leu Leu Gln Gly
 50 55 60
 His Asn Val His Thr Phe Asp Leu Lys Leu Val Trp Val Asp Pro Gly
 65 70 75 80
 Gln Asp Gly Cys Thr Phe His Leu Leu Thr Pro Glu Glu Glu Phe Ser
 85 90 95
 Phe Cys Ala Lys Asp Ser Gln Gly Gln Ala Val Trp Gln Trp Lys Val
 100 105 110
 Thr Trp Ala Val His Gln Ala Leu His Gly Lys Lys Asp Phe Pro Val
 115 120 125
 Leu Gly Ala Gly Leu Glu Pro Ser Gln Pro Pro Asp Cys Arg Cys Ala
 130 135 140
 Glu Tyr Thr Phe Gln Ala Glu Gly Arg Leu Cys Gln Ala Thr Tyr Glu
 145 150 155 160
 Gly Glu Trp Cys Arg Gly Arg Pro His Gly Lys Gly Thr Leu Lys Trp
 165 170 175
 Pro Asp Gly Arg Asn His Val Gly Asn Phe Cys Gln Gly Leu Glu His
 180 185 190
 Gly Phe Gly Ile Arg Leu Leu Pro Gln Ala Ser Glu Asp Lys Phe Asp
 195 200 205
 Cys Tyr Lys Cys His Trp Arg Glu Gly Ser Met Cys Gly Tyr Gly Ile
 210 215 220
 Cys Glu Tyr Ser Thr Asp Glu Val Tyr Lys Gly Tyr Phe Gln Glu Gly
 225 230 235 240
 Leu Arg His Gly Phe Gly Val Leu Glu Ser Gly Pro Gln Ala Pro Gln
 245 250 255
 Pro Phe Arg Tyr Thr Gly His Trp Glu Arg Gly Gln Arg Ser Gly Tyr
 260 265 270
 Gly Ile Glu Glu Asp Gly Asp Arg Gly Glu Arg Tyr Ile Gly Met Trp
 275 280 285
 Gln Ala Gly Gln Arg His Gly Pro Gly Val Met Val Thr Gln Ala Gly
 290 295 300
 Val Cys Tyr Gln Gly Thr Phe Gln Ala Asp Lys Thr Val Gly Pro Gly
 305 310 315 320

Ile Leu Leu Ser Glu Asp Asp Ser Leu Tyr Glu Gly Thr Phe Thr Arg
 325 330 335
 Asp Leu Thr Leu Met Gly Lys Gly Lys Val Thr Phe Pro Asn Gly Phe
 340 345 350
 Thr Leu Glu Gly Ser Phe Gly Ser Gly Ala Gly Arg Gly Leu His Thr
 355 360 365
 Gln Gly Val Leu Asp Thr Ala Ala Leu Pro Pro Asp Pro Ser Ser Thr
 370 375 380
 Cys Lys Arg Gln Leu Gly Val Gly Ala Phe Pro Val Glu Ser Arg Trp
 385 390 395 400
 Gln Gly Val Tyr Ser Pro Phe Arg Asp Phe Val Cys Ala Gly Cys Pro
 405 410 415
 Arg Asp Leu Gln Glu Ala Leu Leu Gly Phe Asp Val Gln Ser Ser Arg
 420 425 430
 Glu Leu Arg Arg Ser Gln Asp Tyr Leu Ser Cys Glu Arg Thr His Pro
 435 440 445
 Glu Asp Ser Val Gly Ser Met Glu Asp Ile Leu Glu Glu Leu Leu Gln
 450 455 460
 His Arg Glu Pro Lys Ala Leu Gln Leu Tyr Leu Arg Lys Ala Leu Ser
 465 470 475 480
 Asn Ser Leu His Pro Leu Gly Lys Leu Leu Arg Thr Leu Met Leu Thr
 485 490 495
 Phe Gln Ala Thr Tyr Ala Gly Val Gly Ala Asn Lys His Leu Gln Gly
 500 505 510
 Leu Ala Gln Glu Glu Val Lys Gln His Ala Gln Glu Leu Trp Ala Ala
 515 520 525
 Tyr Arg Gly Leu Leu Arg Val Ala Leu Glu Arg Lys Gly Gln Ala Leu
 530 535 540
 Glu Glu Asp Glu Asp Thr Glu Thr Arg Asp Leu Gln Val His Gly Leu
 545 550 555 560
 Val Leu Pro Leu Met Leu Pro Ser Phe Tyr Ser Glu Leu Phe Thr Leu
 565 570 575
 Tyr Leu Leu Leu His Glu Arg Glu Asp Ser Phe Tyr Ser Gln Gly Ile
 580 585 590
 Ala Asn Leu Ser Leu Phe Pro Asp Thr Gln Leu Leu Glu Phe Leu Asp
 595 600 605

Val Gln Lys His Leu Trp Pro Leu Lys Asp Leu Thr Leu Thr Ser Asn
 610 615 620
 Gln Arg Tyr Ser Leu Val Arg Asp Lys Cys Phe Leu Ser Ala Thr Glu
 625 630 635 640
 Cys Leu Gln Lys Ile Met Thr Thr Val Asp Pro Arg Glu Lys Leu Glu
 645 650 655
 Val Leu Glu Arg Thr Tyr Gly Glu Ile Glu Gly Thr Val Ser Arg Val
 660 665 670
 Leu Gly Arg Glu Tyr Lys Arg Pro Trp Thr Thr Cys Cys His Phe Ser
 675 680 685
 Ser Thr Trp Cys Arg Ala Pro Glu Phe Ser Thr Trp Glu Pro Arg Ser
 690 695 700
 Thr
 705

<210> 4774

<211> 907

<212> PRT

<213> Homo sapiens

<400> 4774

Met Gln Tyr Gln Cys Lys Lys Cys Asn Val Val Phe Pro Arg Ile Phe
 1 5 10 15
 Asp Leu Ile Thr His Gln Lys Lys Gln Cys Tyr Lys Asp Glu Asp Asp
 20 25 30
 Asp Ala Gln Asp Glu Ser Gln Thr Glu Asp Ser Met Asp Ala Thr Asp
 35 40 45
 Gln Val Val Tyr Lys His Cys Thr Val Ser Gly Gln Thr Asp Ala Ala
 50 55 60
 Lys Asn Ala Ala Ala Pro Ala Ala Ser Ser Gly Ser Gly Thr Ser Thr
 65 70 75 80
 Pro Leu Ile Pro Ser Pro Lys Pro Glu Pro Glu Lys Thr Ser Pro Lys
 85 90 95
 Pro Glu Tyr Pro Ala Glu Lys Pro Lys Gln Ser Asp Pro Ser Pro Pro
 100 105 110

Ser Gln Gly Thr Lys Pro Ala Leu Pro Leu Ala Ser Thr Ser Ser Asp
 115 120 125
 Pro Pro Gln Ala Ser Thr Ala Gln Pro Gln Pro Gln Pro Gln Pro Pro
 130 135 140
 Lys Gln Pro Gln Leu Ile Gly Arg Pro Pro Ser Ala Ser Gln Thr Pro
 145 150 155 160
 Val Pro Ser Ser Pro Leu Gln Ile Ser Met Thr Ser Leu Gln Asn Ser
 165 170 175
 Leu Pro Pro Gln Leu Leu Gln Tyr Gln Cys Asp Gln Cys Thr Val Ala
 180 185 190
 Phe Pro Thr Leu Glu Leu Trp Gln Glu His Gln His Val His Phe Leu
 195 200 205
 Ala Ala Gln Asn Gln Phe Leu His Ser Pro Phe Leu Glu Arg Pro Met
 210 215 220
 Asp Met Pro Tyr Met Ile Phe Asp Pro Asn Asn Pro Leu Met Thr Gly
 225 230 235 240
 Gln Leu Leu Gly Ser Ser Leu Thr Gln Met Pro Pro Gln Ala Ser Ser
 245 250 255
 Ser His Thr Thr Ala Pro Thr Thr Val Ala Ala Ser Leu Lys Arg Lys
 260 265 270
 Leu Asp Asp Lys Glu Asp Asn Asn Cys Ser Glu Lys Glu Gly Gly Asn
 275 280 285
 Ser Gly Glu Asp Gln His Arg Asp Lys Arg Leu Arg Thr Thr Ile Thr
 290 295 300
 Pro Glu Gln Leu Glu Ile Leu Tyr Glu Lys Tyr Leu Leu Asp Ser Asn
 305 310 315 320
 Pro Thr Arg Lys Met Leu Asp His Ile Ala Arg Glu Val Gly Leu Lys
 325 330 335
 Lys Arg Val Val Gln Val Trp Phe Gln Asn Thr Arg Ala Arg Glu Arg
 340 345 350
 Lys Gly Gln Phe Arg Ala Val Gly Pro Ala Gln Ser His Lys Arg Cys
 355 360 365
 Pro Phe Cys Arg Ala Leu Phe Lys Ala Lys Ser Ala Leu Glu Ser His
 370 375 380
 Ile Arg Ser Arg His Trp Asn Glu Gly Lys Gln Ala Gly Tyr Ser Leu

385	390	395	400
Pro Pro Ser Pro Leu Ile Ser Thr Glu Asp Gly Gly Glu Ser Pro Gln			
	405	410	415
Lys Tyr Ile Tyr Phe Asp Tyr Pro Ser Leu Pro Leu Thr Lys Ile Asp			
	420	425	430
Leu Ser Ser Glu Asn Glu Leu Ala Ser Thr Val Ser Thr Pro Val Ser			
	435	440	445
Lys Thr Ala Glu Leu Ser Pro Lys Asn Leu Leu Ser Pro Ser Ser Phe			
	450	455	460
Lys Ala Glu Cys Ser Glu Asp Val Glu Asn Leu Asn Ala Pro Pro Ala			
465	470	475	480
Glu Ala Gly Tyr Asp Gln Asn Lys Thr Asp Phe Asp Glu Thr Ser Ser			
	485	490	495
Ile Asn Thr Ala Ile Ser Asp Ala Thr Thr Gly Asp Glu Gly Asn Thr			
	500	505	510
Glu Met Glu Ser Thr Thr Gly Ser Ser Gly Asp Val Lys Pro Ala Leu			
	515	520	525
Ser Pro Lys Glu Pro Lys Thr Leu Asp Thr Leu Pro Lys Pro Ala Thr			
	530	535	540
Thr Pro Thr Thr Glu Val Cys Asp Asp Lys Phe Leu Phe Ser Leu Thr			
545	550	555	560
Ser Pro Ser Ile His Phe Asn Asp Lys Asp Gly Asp His Asp Gln Ser			
	565	570	575
Phe Tyr Ile Thr Asp Asp Pro Asp Asp Asn Ala Asp Arg Gly Glu Thr			
	580	585	590
Ser Ser Ile Ala Asp Pro Ser Ser Pro Asn Pro Phe Gly Ser Ser Asn			
	595	600	605
Pro Phe Lys Ser Lys Ser Asn Asp Arg Pro Gly His Lys Arg Phe Arg			
	610	615	620
Thr Gln Met Ser Asn Leu Gln Leu Lys Val Leu Lys Ala Cys Phe Ser			
625	630	635	640
Asp Tyr Arg Thr Pro Thr Met Gln Glu Cys Glu Met Leu Gly Asn Glu			
	645	650	655
Ile Gly Leu Pro Lys Arg Val Val Gln Val Trp Phe Gln Asn Ala Arg			
	660	665	670
Ala Lys Glu Lys Lys Phe Lys Ile Asn Ile Gly Lys Pro Phe Met Ile			

675	680	685
Asn Gln Gly Gly Thr Glu Gly Thr Lys Pro Glu Cys Thr Leu Cys Gly		
690	695	700
Val Lys Tyr Ser Ala Arg Leu Ser Ile Arg Asp His Ile Phe Ser Lys		
705	710	715
Gln His Ile Ser Lys Val Arg Glu Thr Val Gly Ser Gln Leu Asp Arg		
725	730	735
Glu Lys Asp Tyr Leu Ala Pro Thr Thr Val Arg Gln Leu Met Ala Gln		
740	745	750
Gln Glu Leu Asp Arg Ile Lys Lys Ala Ser Asp Val Leu Gly Leu Thr		
755	760	765
Val Gln Gln Pro Gly Met Met Asp Ser Ser Ser Leu His Gly Ile Ser		
770	775	780
Leu Pro Thr Ala Tyr Pro Gly Leu Pro Gly Leu Pro Pro Val Leu Leu		
785	790	795
Pro Gly Met Asn Gly Pro Ser Ser Leu Pro Gly Phe Pro Gln Asn Ser		
805	810	815
Asn Thr Leu Thr Pro Pro Gly Ala Gly Met Leu Gly Phe Pro Thr Ser		
820	825	830
Ala Thr Ser Ser Pro Ala Leu Ser Leu Ser Ser Ala Pro Thr Lys Pro		
835	840	845
Leu Leu Gln Thr Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro		
850	855	860
Ser Ser Ser Leu Ser Gly Gln Gln Thr Glu Gln Gln Asn Lys Glu Ser		
865	870	875
Glu Lys Lys Gln Thr Lys Pro Asn Lys Val Lys Lys Ile Lys Glu Glu		
885	890	895
Glu Leu Glu Ala Thr Lys Pro Glu Lys His Pro		
900	905	

<210> 4775

<211> 412

<212> PRT

<213> Homo sapiens

<400> 4775

Met Thr Phe Thr Phe Gln Ser Glu Asp Leu Lys Arg Asp Cys Gly Lys
 1 5 10 15
 Lys Met Ser His Gln His Val Phe Ser Leu Ala Met Glu Glu Asp Val
 20 25 30
 Lys Thr Ala Asp Thr Lys Lys Ala Ser Arg Ile Leu Asp His Glu Lys
 35 40 45
 Glu Asn Thr Arg Ser Ile Cys Leu Leu Glu Gln Lys Arg Lys Val Val
 50 55 60
 Ser Ser Asn Ile Asp Val Pro Pro Ala Arg Lys Ser Ser Glu Glu Leu
 65 70 75 80
 Asp Met Asp Lys Val Thr Ala Ala Met Val Leu Thr Ser Leu Ser Thr
 85 90 95
 Ser Pro Leu Val Arg Ser Pro Pro Val Arg Pro Asn Glu Ser Leu Ser
 100 105 110
 Gly Ser Trp Lys Glu Gly Gly Cys Val Pro Ser Ser Thr Ser Ser Ser
 115 120 125
 Gly Tyr Trp Ser Trp Ser Ala Pro Ser Asp Gln Ser Asn Pro Ser Thr
 130 135 140
 Pro Ser Pro Pro Leu Ser Ala Asp Ser Phe Lys Pro Phe Arg Ser Pro
 145 150 155 160
 Ala Gln Pro Asp Asp Gly Ile Asp Glu Ala Glu Ala Ser Asn Leu Leu
 165 170 175
 Phe Asp Glu Pro Ile Pro Arg Lys Arg Lys Asn Ser Met Lys Val Met
 180 185 190
 Phe Lys Cys Leu Trp Lys Asn Cys Gly Lys Val Leu Ser Thr Ala Ala
 195 200 205
 Gly Ile Gln Lys His Ile Arg Thr Ile His Leu Gly Arg Val Gly Asp
 210 215 220
 Ser Asp Tyr Ser Asp Gly Glu Glu Asp Phe Tyr Tyr Thr Glu Ile Lys
 225 230 235 240
 Leu Asn Thr Asp Ser Val Ala Asp Gly Leu Ser Ser Leu Ala Pro Val
 245 250 255
 Ser Pro Ser Gln Ser Leu Ala Ser Pro Pro Thr Phe Pro Ile Pro Asp
 260 265 270
 Ser Ser Arg Thr Glu Thr Pro Cys Ala Lys Thr Glu Thr Lys Leu Met

275	280	285
Thr Pro Leu Ser Arg Ser Ala Pro Thr Thr Leu Tyr Leu Val His Thr		
290	295	300
Asp His Ala Tyr Gln Ala Thr Pro Pro Val Thr Ile Pro Gly Ser Ala		
305	310	315
Lys Phe Thr Pro Asn Gly Ser Ser Phe Ser Ile Ser Trp Gln Ser Pro		
325	330	335
Pro Val Thr Phe Thr Gly Ile Pro Val Ser Pro Thr His His Pro Val		
340	345	350
Gly Thr Gly Glu Gln Arg Gln His Ala His Thr Val Leu Ser Ser Pro		
355	360	365
Pro Arg Gly Thr Val Ser Leu Arg Lys Pro Arg Gly Glu Gly Lys Lys		
370	375	380
Cys Arg Lys Val Tyr Gly Met Glu Asn Arg Asp Met Trp Cys Thr Ala		
385	390	395
Cys Arg Trp Lys Lys Ala Cys Gln Arg Phe Leu Asp		
405	410	

<210> 4776

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4776

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Thr Leu Asn Val Asn
1 5 10 15
Gly Leu Asn Ala Pro Ile Lys Arg His Arg Leu Ala Asn Trp Ile Lys
20 25 30
Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu Thr His Leu Thr Cys
35 40 45
Arg Asp Thr His Arg Leu Lys Ile Lys Gly Trp Arg Lys Ile Tyr Gln
50 55 60
Ala Ser Gly Lys Gln Lys Lys Ala Gly Val Ala Ile Leu Val Ser Asp
65 70 75 80
Lys Thr Asp Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His

	85		90		95
Tyr Thr Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Ile Leu					
	100		105		110
Asn Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Lys Gln Val					
	115		120		125
Leu Ser Asp Val Gln Arg Asp Leu Asp Ser His Thr Leu Ile Met Gly					
	130		135		140
Asp Phe Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys					
145		150		155	160
Val Asn Lys His Thr Gln Glu Phe Asn Ser Ala Leu His Gln Ala Asp					
	165		170		175
Leu Ile Asp Ile Tyr Lys Thr Leu His Pro Lys Ser Thr Glu Tyr Thr					
	180		185		190
Phe Phe Ser Ala Pro His His Thr Tyr Ser Lys Ile Asp His Ile Phe					
	195		200		205
Gly Ser Lys Ala Leu Phe Ser Lys Cys Lys Arg Thr Glu Ile Ile Thr					
	210		215		220
Asn Cys Leu Ser Glu His Ser Ala Ile Lys Leu Glu Leu Arg Ile Lys					
225		230		235	240
Asn Leu Thr Gln Asn Arg Ser Thr Thr Trp Lys Leu Asn Asn Leu Leu					
	245		250		255
Leu Asn Asp Tyr Trp Val His Asn Glu Met Lys Ala Glu Ile Lys Met					
	260		265		270
Phe Phe Glu Thr Asn Glu Asn Lys Asp Thr Thr Tyr Gln Asn Leu Trp					
	275		280		285
Asp Ala Phe Lys Ala Val Cys Thr Gly Lys Phe Ile Ala Leu Asn Ala					
	290		295		300
His Lys Arg Lys Lys Glu Arg Lys Lys Glu					
305		310			

<210> 4777

<211> 264

<212> PRT

<213> Homo sapiens

<400> 4777

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Thr Leu Asn Val Asn
 1 5 10 15

 Gly Leu Asn Thr Pro Ile Lys Arg His Arg Leu Ala Ser Trp Ile Lys
 20 25 30
 Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu Thr His Leu Ile Cys
 35 40 45
 Lys Asp Ala Tyr Arg Leu Lys Ile Lys Gly Trp Arg Lys Ile Tyr Gln
 50 55 60
 Ala Asn Arg Lys Gln Lys Lys Ala Gly Val Ala Ile Leu Val Ser Asp
 65 70 75 80
 Lys Ser Asp Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Lys Gly His
 85 90 95
 Tyr Ile Met Val Lys Gly Ser Met Gln Gln Glu Glu Leu Thr Ile Leu
 100 105 110
 Asn Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Asn Glu Val
 115 120 125
 Leu Arg Asp Pro Gln Arg Asn Leu Asp Ser His Thr Ile Ile Met Gly
 130 135 140
 Asp Phe Asn Thr Pro Leu Ser Ile Phe Asp Arg Ser Thr Arg Gln Lys
 145 150 155 160
 Val Asn Lys Asp Thr Gln Asp Leu Asn Leu Thr Leu Gln Gln Ala Asp
 165 170 175
 Leu Arg Asp Ile Tyr Arg Thr Leu His Pro Lys Ser Thr Glu Tyr Thr
 180 185 190
 Phe Phe Ser Ala Leu His His Thr Tyr Ser Lys Thr Asp His Ile Leu
 195 200 205
 Gly Ser Lys Ala Leu Leu Ser Lys Cys Lys Arg Thr Glu Ile Thr Thr
 210 215 220
 Asn Cys Leu Ser Asp His Ser Ala Ile Lys Leu Glu Leu Arg Ile Lys
 225 230 235 240
 Lys Leu Thr Gln Tyr His Ile Ser Thr Trp Lys Leu Asn Asn Leu Leu
 245 250 255
 Leu Asn Asp Tyr Trp Val Asn Asn
 260

<210> 4778

<211> 852

<212> PRT

<213> Homo sapiens

<400> 4778

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Met Leu Ile Thr Glu Arg Lys His Phe Arg Ser Gly Arg Ile Ala Gln
 1             5             10             15
Ser Met Ser Glu Ala Asn Leu Ile Asp Met Glu Ala Gly Lys Val Ser
          20             25             30
Lys Ser Cys Asn Ile Thr Glu Cys Gln Asp Pro Asp Leu Leu His Asn
          35             40             45
Trp Pro Asp Ala Phe Thr Leu Arg Gly Asn Asn Ala Ser Lys Val Ala
          50             55             60
Asn Pro Phe Trp Asn Gln Leu Ser Ala Ser Asn Pro Phe Leu Asp Asp
 65             70             75             80
Ile Thr Gln Leu Arg Asn Asn Arg Lys Arg Asn Asn Ile Ser Ile Leu
          85             90             95
Lys Glu Asp Pro Phe Leu Phe Cys Arg Glu Ile Glu Asn Gly Asn Ser
          100            105            110
Phe Asp Ser Ser Gly Asp Glu Leu Asp Val His Gln Leu Leu Arg Gln
          115            120            125
Thr Ser Ser Arg Asn Ser Gly Arg Ser Lys Ser Val Ser Glu Leu Leu
          130            135            140
Asp Ile Leu Asp Asp Thr Ala His Ala His Gln Ser Ile His Asn Ser
          145            150            155            160
Asp Gln Ile Leu Leu His Asp Leu Glu Trp Pro Lys Asn Asp Arg Glu
          165            170            175
Ala Tyr Lys Met Ala Trp Leu Ser Gln Arg Gln Leu Ala Arg Ser Cys
          180            185            190
Leu Asp Leu Asn Thr Ile Ser Gln Ser Pro Gly Trp Ala Gln Thr Gln
          195            200            205
Leu Ala Glu Val Thr Ile Ala Cys Lys Val Asn His Gln Gly Gly Ser
          210            215            220

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Val Gln Leu Pro Glu Ser Asp Ile Thr Val His Val Pro Gln Gly His
 225 230 235 240
 Val Ala Val Gly Glu Phe Gln Glu Val Ser Leu Arg Ala Phe Leu Asp
 245 250 255
 Pro Pro His Met Leu Asn His Asn Leu Ser Cys Thr Val Ser Pro Leu
 260 265 270
 Leu Glu Ile Met Leu Gly Asn Leu Asn Thr Met Glu Ala Leu Leu Leu
 275 280 285
 Glu Met Lys Ile Gly Ala Glu Val Arg Lys Asp Pro Phe Ser Gln Val
 290 295 300
 Met Thr Glu Met Val Cys Leu His Ser Leu Gly Lys Glu Gly Pro Phe
 305 310 315 320
 Lys Val Leu Ser Asn Cys Tyr Ile Tyr Lys Asp Thr Ile Gln Val Lys
 325 330 335
 Leu Ile Asp Leu Ser Gln Val Met Tyr Leu Val Val Ala Ala Gln Ala
 340 345 350
 Lys Ala Leu Pro Ser Pro Ala Ala Thr Ile Trp Asp Tyr Ile His Lys
 355 360 365
 Thr Thr Ser Ile Gly Ile Tyr Gly Pro Lys Tyr Ile His Pro Asn Phe
 370 375 380
 Thr Val Val Leu Thr Val Cys Gly His Asn Tyr Met Pro Gly Gln Leu
 385 390 395 400
 Thr Ile Ser Asp Ile Lys Lys Gly Gly Lys Asn Ile Ser Pro Val Val
 405 410 415
 Phe Gln Leu Trp Gly Lys Gln Ser Phe Leu Leu Asp Lys Pro Gln Asp
 420 425 430
 Leu Ser Ile Ser Ile Phe Ser Cys Asp Pro Asp Phe Glu Val Lys Thr
 435 440 445
 Glu Gly Glu Arg Lys Glu Ile Lys Gln Lys Gln Leu Glu Ala Gly Glu
 450 455 460
 Val Val His Gln Gln Phe Leu Phe Ser Leu Val Glu His Arg Glu Met
 465 470 475 480
 His Leu Phe Asp Phe Cys Val Gln Val Glu Pro Pro Asn Gly Glu Pro
 485 490 495
 Val Ala Gln Phe Ser Ile Thr Thr Pro Asp Pro Thr Pro Asn Leu Lys
 500 505 510

Arg Leu Leu Asn Leu Pro Gly Tyr Leu Gln Lys Lys Glu Glu Ile Lys
 515 520 525
 Ser Ala Pro Leu Ser Pro Lys Ile Leu Val Lys Tyr Pro Thr Phe Gln
 530 535 540
 Asp Lys Thr Leu Asn Phe Ser Asn Tyr Gly Val Thr Leu Lys Ala Val
 545 550 555 560
 Leu Arg Gln Ser Lys Ile Asp Tyr Phe Leu Glu Tyr Phe Lys Gly Asp
 565 570 575
 Thr Ile Ala Leu Leu Gly Glu Gly Lys Val Lys Ala Ile Gly Gln Ser
 580 585 590
 Lys Val Lys Glu Trp Tyr Val Gly Val Leu Arg Gly Lys Ile Gly Leu
 595 600 605
 Val His Cys Lys Asn Val Lys Val Ile Ser Lys Glu Gln Val Met Phe
 610 615 620
 Met Ser Asp Ser Val Phe Thr Thr Arg Asn Leu Leu Glu Gln Ile Val
 625 630 635 640
 Leu Pro Leu Lys Lys Leu Thr Tyr Ile Tyr Ser Val Val Leu Thr Leu
 645 650 655
 Val Ser Glu Lys Val Tyr Asp Trp Lys Val Leu Ala Asp Val Leu Gly
 660 665 670
 Tyr Ser His Leu Ser Leu Glu Asp Phe Asp Gln Ile Gln Ala Asp Lys
 675 680 685
 Glu Ser Glu Lys Val Ser Tyr Val Ile Lys Lys Leu Lys Glu Asp Cys
 690 695 700
 His Thr Glu Arg Asn Thr Arg Lys Phe Leu Tyr Glu Leu Ile Val Ala
 705 710 715 720
 Leu Leu Lys Met Asp Cys Gln Glu Leu Val Ala Arg Leu Ile Gln Glu
 725 730 735
 Ala Ala Val Leu Thr Ser Ala Val Lys Leu Gly Lys Gly Trp Arg Glu
 740 745 750
 Leu Ala Glu Lys Leu Val Arg Leu Thr Lys Gln Gln Met Glu Ala Tyr
 755 760 765
 Glu Ile Pro His Arg Gly Asn Thr Gly Asp Val Ala Val Glu Met Met
 770 775 780
 Trp Lys Pro Ala Tyr Asp Phe Leu Tyr Thr Trp Ser Ala His Tyr Gly
 785 790 795 800

Asn Asn Tyr Thr Asp Val Leu Gln Asp Leu Gln Ser Ala Leu Asp Arg
 805 810 815
 Met Lys Asn Pro Val Thr Lys His Trp Arg Glu Leu Thr Gly Val Leu
 820 825 830
 Ile Leu Val Asn Ser Leu Glu Val Leu Arg Val Thr Ala Phe Ser Thr
 835 840 845
 Ser Glu Glu Val
 850

<210> 4779

<211> 865

<212> PRT

<213> Homo sapiens

<400> 4779

Met Ser Leu Gln Asp Ser Thr Leu Ser Arg Glu Gly Lys Pro Glu Gly
 1 5 10 15
 Glu Ile Met Ala Ala Val Phe Phe Ser Val Gly Arg Leu Ser Pro Glu
 20 25 30
 Val Thr Gln Pro Asp Glu Asp Leu His Leu Gln Ala Glu Glu Thr Gln
 35 40 45
 Leu Val Lys Glu Ser Val Thr Phe Lys Asp Val Ala Ile Asp Phe Thr
 50 55 60
 Leu Glu Glu Trp Arg Leu Met Asp Pro Thr Gln Arg Asn Leu His Lys
 65 70 75 80
 Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Val Ser Leu Gly Leu Ala
 85 90 95
 Val Ser Lys Pro Asp Met Ile Ser His Leu Glu Asn Gly Lys Gly Pro
 100 105 110
 Trp Val Thr Val Arg Glu Ile Ser Arg Ile Pro Tyr Pro Asp Met Glu
 115 120 125
 Pro Lys Pro Ala Thr Lys Asn Ala Thr Arg Thr Lys Ala Ile Ser Glu
 130 135 140
 Asp Leu Ser Gln Glu Ala Ile Leu Glu Lys Leu Thr Glu Asn Gly Leu
 145 150 155 160

Trp Asp Ser Arg Met Glu Gly Leu Trp Lys Trp Asn Asp Arg Ile Leu			
	165	170	175
Arg Leu Gln Asn Asn Gln Glu Asn His Leu Ser Gln Arg Ile Ile Pro			
	180	185	190
Leu Lys Lys Thr Pro Thr Ser Gln Arg Gly Phe Arg Phe Glu Ser Ile			
	195	200	205
Leu Ile Pro Glu Pro Gly Ile Ala Thr Glu Glu Leu His Ser Arg Cys			
	210	215	220
Gln Thr Gln Glu Glu Asn Phe Thr Glu Asn Leu Asn Leu Ile Thr Asp			
225	230	235	240
Thr His Leu Gly Lys Ile Ile Cys Lys Glu Met Lys Gly Ser Lys Ala			
	245	250	255
Ile Arg Gln Thr Ser Glu Leu Thr Leu Gly Lys Lys Ser Asn Asn Lys			
	260	265	270
Glu Lys Pro Tyr Lys Cys Ser Thr Cys Glu Lys Ala Phe His Tyr Arg			
	275	280	285
Ser Leu Leu Ile Gln His Gln Arg Thr His Thr Lys Glu Lys Pro Tyr			
	290	295	300
Glu Cys Asn Glu Cys Gly Lys Thr Phe Ser Gln Pro Ser Tyr Leu Ser			
305	310	315	320
Gln His Lys Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu			
	325	330	335
Cys Gly Lys Ala Phe Ile Ala Ser Ser Ser Leu Met Val His Gln Arg			
	340	345	350
Ile His Thr Lys Glu Lys Pro Tyr Gln Cys Asn Val Cys Gly Lys Ser			
	355	360	365
Phe Ser Gln Cys Ala Arg Leu Asn Gln His Gln Arg Ile Gln Thr Gly			
	370	375	380
Glu Lys Pro Tyr Lys Cys Ser Glu Cys Gly Lys Ala Phe Ser Asp Lys			
385	390	395	400
Ser Lys Leu Ala Arg His Gln Glu Thr His Asn Gly Glu Lys Pro Tyr			
	405	410	415
Lys Cys Asp Asp Cys Gly Lys Ala Phe Arg Asn Lys Ser Tyr Leu Ser			
	420	425	430
Val His Gln Lys Thr His Thr Glu Glu Lys Pro Tyr Gln Cys Asn Glu			
	435	440	445

Cys Gly Lys Ser Phe Lys Asn Thr Thr Ile Phe Asn Val His Gln Arg
 450 455 460
 Ile His Thr Gly Glu Lys Pro Phe Arg Cys Asn Glu Cys Gly Lys Ala
 465 470 475 480
 Tyr Arg Ser Asn Ser Ser Leu Ile Val His Ile Arg Thr His Thr Gly
 485 490 495
 Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Asn Arg Ile
 500 505 510
 Ala Asn Phe Thr Glu His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
 515 520 525
 Lys Cys Asn Glu Cys Gly Lys Ala Phe Ile Asn Tyr Ser Cys Leu Thr
 530 535 540
 Val His His Arg Met His Thr Gly Glu Lys Pro Tyr Lys Cys Thr Glu
 545 550 555 560
 Cys Gly Lys Ala Phe Met Arg Ser Ser Ser Leu Ile Ile His Gln Cys
 565 570 575
 Ile His Thr Glu Glu Lys Pro Tyr Leu Cys Asn Glu Cys Gly Glu Ser
 580 585 590
 Phe Arg Ile Lys Ser His Leu Thr Val His Gln Arg Ile His Thr Gly
 595 600 605
 Glu Lys Pro Tyr Lys Cys Thr Asp Cys Glu Arg Ala Phe Thr Lys Met
 610 615 620
 Val Asn Leu Lys Glu His Gln Lys Ile His Thr Gly Val Lys Pro Tyr
 625 630 635 640
 Lys Cys Tyr Asp Cys Gly Lys Ser Phe Arg Thr Lys Ser Tyr Leu Ile
 645 650 655
 Val His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu
 660 665 670
 Cys Glu Lys Ala Phe Thr Asn Thr Ser Gln Leu Thr Val His Gln Arg
 675 680 685
 Arg His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val
 690 695 700
 Phe Thr Ser Asn Ser Gly Phe Asn Thr His Gln Arg Thr His Thr Gly
 705 710 715 720
 Glu Lys Pro Phe Lys Cys Asn Asp Cys Gly Lys Ala Phe Ser Gln Met
 725 730 735

Val His Val Thr Glu His Gln Lys Ile His Ser Gly Glu Lys Pro Tyr
 740 745 750
 Lys Cys Asp Val Cys Gly Lys Ala Phe Arg Arg Gly Ser Tyr Leu Thr
 755 760 765
 Val His Trp Arg Thr His Thr Gly Glu Lys Pro Tyr Thr Cys Lys Glu
 770 775 780
 Cys Gly Lys Gly Cys Ile Thr Leu Ser Gln Leu Thr Leu His Gln Arg
 785 790 795 800
 Ile His Thr Gly Glu Arg Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala
 805 810 815
 Phe Arg Thr Asn Ser Asp Phe Thr Val His Leu Arg Met His Thr Gly
 820 825 830
 Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Arg Ser Ser
 835 840 845
 Ser Ser Leu Thr Val His Gln Arg Ile His Gln Arg Glu Thr Gln Leu
 850 855 860
 Ile
 865

<210> 4780

<211> 547

<212> PRT

<213> Homo sapiens

<400> 4780

Met Leu Glu Gly Arg Gln Thr Pro Ala Ser Thr Leu Glu Gln Asp Ala
 1 5 10 15
 Thr Asp Tyr Arg Leu Arg Ser Leu Arg Lys Leu Leu Ala Gln Pro Arg
 20 25 30
 Glu Gly Leu Leu Ala Pro Phe Ser Lys Arg Asn Ser Thr Ala Ser Phe
 35 40 45
 Pro Gly Arg Thr Ser His Ile Pro Val Gln Gln Pro Glu Lys Arg Lys
 50 55 60
 Gln Lys Pro Ser Pro Glu Pro Ser Gln Asp Ser Pro His Ser Asp Lys
 65 70 75 80

Trp Pro Pro Gly His Pro Val Lys Asn Leu Pro Gln Met Arg Gly Pro
 85 90 95
 Arg Pro Arg Pro Ala Gly Asp Ser Pro Arg Lys Thr Gln Trp Leu Asn
 100 105 110
 Gln Val Glu Ser Tyr Ile Ala Glu Gln Arg Arg Gly Asp Arg Met Arg
 115 120 125
 Pro Gln Ala Pro Gly Arg Gly Trp His Gly Glu Glu Glu Val Val Ala
 130 135 140
 Ala Ala Gly Gln Glu Gly Gln Val Glu Gly Glu Glu Glu Gly Glu Glu
 145 150 155 160
 Glu Glu Glu Glu Glu Asp Met Ser Glu Val Phe Glu Tyr Val Pro Val
 165 170 175
 Phe Asp Pro Val Val Asn Trp Asp Gln Thr Phe Ser Ala Arg Asn Leu
 180 185 190
 Asp Phe Gln Ala Leu Arg Thr Asp Trp Ile Asp Leu Ser Cys Asn Thr
 195 200 205
 Ser Gly Asn Leu Leu Leu Pro Glu Gln Glu Ala Leu Glu Val Thr Arg
 210 215 220
 Val Phe Leu Lys Lys Leu Asn Gln Arg Ser Arg Gly Arg Tyr Gln Leu
 225 230 235 240
 Gln Arg Ile Val Asn Val Glu Lys Arg Gln Asp Gln Leu Arg Gly Gly
 245 250 255
 Arg Tyr Leu Leu Glu Leu Glu Leu Leu Glu Gln Gly Gln Arg Val Val
 260 265 270
 Arg Leu Ser Glu Tyr Val Ser Ala Arg Gly Trp Gln Gly Ile Asp Pro
 275 280 285
 Ala Gly Gly Glu Glu Val Glu Ala Arg Asn Leu Gln Gly Leu Val Trp
 290 295 300
 Asp Pro His Asn Arg Arg Arg Gln Val Leu Asn Thr Arg Ala Gln Glu
 305 310 315 320
 Pro Lys Leu Cys Trp Pro Gln Gly Phe Ser Trp Ser His Arg Ala Val
 325 330 335
 Val His Phe Val Val Pro Val Lys Asn Gln Ala Arg Trp Val Gln Gln
 340 345 350
 Phe Ile Lys Asp Met Glu Asn Leu Phe Gln Val Thr Gly Asp Pro His
 355 360 365

Phe Asn Ile Val Ile Thr Asp Tyr Ser Ser Glu Asp Met Asp Val Glu
 370 375 380
 Met Ala Leu Lys Arg Ser Lys Leu Arg Ser Tyr Gln Tyr Val Lys Leu
 385 390 395 400
 Ser Gly Asn Phe Glu Arg Ser Ala Gly Leu Gln Ala Gly Ile Asp Leu
 405 410 415
 Val Lys Asp Pro His Ser Ile Ile Phe Leu Cys Asp Leu His Ile His
 420 425 430
 Phe Pro Ala Gly Val Ile Asp Ala Ile Arg Lys His Cys Val Glu Gly
 435 440 445
 Lys Met Ala Phe Ala Pro Met Val Met Arg Leu His Cys Gly Ala Thr
 450 455 460
 Pro Gln Trp Pro Glu Gly Tyr Trp Glu Val Asn Gly Phe Gly Leu Leu
 465 470 475 480
 Gly Ile Tyr Lys Ser Asp Leu Asp Arg Ile Gly Gly Met Asn Thr Lys
 485 490 495
 Glu Phe Arg Asp Arg Trp Gly Gly Glu Asp Trp Glu Leu Leu Asp Arg
 500 505 510
 Ile Leu Gln Ala Gly Leu Asp Val Glu Arg Leu Ser Leu Arg Asn Phe
 515 520 525
 Phe His His Phe His Ser Lys Arg Gly Met Trp Ser Arg Arg Gln Met
 530 535 540
 Lys Thr Leu
 545

<210> 4781

<211> 443

<212> PRT

<213> Homo sapiens

<400> 4781

Met Ser Gln Arg Gln Tyr Pro Glu Cys Tyr Leu Ala Pro Asn Gly Cys
 1 5 10 15
 Leu Val Ser Asn Cys Gly Val Asn Lys Met Ser Asn Glu Glu Leu Val
 20 25 30

Gly Gln Asn His Gly Met Glu Gly Glu Ala Cys Thr Gly Gly Asp Val
 35 40 45
 Thr Phe Ser Asp Val Ala Ile Asp Phe Ser His Glu Glu Trp Ala Cys
 50 55 60
 Leu Asp Ser Ala Gln Arg Asp Leu Tyr Lys Asp Val Met Val Gln Asn
 65 70 75 80
 Tyr Glu Asn Leu Val Ser Val Gly Leu Ser Val Thr Lys Pro Tyr Val
 85 90 95
 Ile Met Leu Leu Glu Asp Gly Lys Glu Pro Trp Met Met Glu Lys Lys
 100 105 110
 Leu Ser Lys Asp Trp Glu Ser Arg Trp Glu Asn Lys Glu Leu Ser Thr
 115 120 125
 Lys Lys Asp Ile Tyr Asp Glu Asp Ser Pro Gln Pro Val Thr Met Glu
 130 135 140
 Lys Val Val Lys Gln Ser Tyr Glu Phe Ser Asn Ser Asn Lys Asn Leu
 145 150 155 160
 Glu Tyr Thr Glu Cys Asp Thr Phe Arg Ser Thr Phe His Ser Lys Ser
 165 170 175
 Thr Leu Ser Glu Pro Gln Asn Asn Ser Ala Glu Gly Asn Ser His Lys
 180 185 190
 Tyr Asp Ile Leu Lys Lys Asn Leu Ser Lys Lys Ser Val Ile Lys Ser
 195 200 205
 Glu Arg Ile Asn Gly Gly Lys Lys Leu Leu Asn Ser Asn Lys Ser Gly
 210 215 220
 Ala Ala Phe Asn Gln Ser Lys Ser Leu Thr Leu Pro Gln Thr Cys Asn
 225 230 235 240
 Arg Glu Lys Ile Tyr Thr Cys Ser Glu Cys Gly Lys Ala Phe Gly Lys
 245 250 255

 Gln Ser Ile Leu Asn Arg His Trp Arg Ile His Thr Gly Glu Lys Pro
 260 265 270
 Tyr Glu Cys Arg Glu Cys Gly Lys Thr Phe Ser His Gly Ser Ser Leu
 275 280 285
 Thr Arg His Gln Ile Ser His Ser Gly Glu Lys Pro Tyr Lys Cys Ile
 290 295 300
 Glu Cys Gly Lys Ala Phe Ser His Gly Ser Ser Leu Thr Asn His Gln

305 310 315 320
 Ser Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Met Asn Cys Gly Lys
 325 330 335
 Ser Phe Ser Arg Val Ser Leu Leu Ile Gln His Leu Arg Ile His Thr
 340 345 350
 Gln Glu Lys Arg Tyr Glu Cys Arg Ile Cys Gly Lys Ala Phe Ile His
 355 360 365
 Ser Ser Ser Leu Ile His His Gln Lys Ser His Thr Gly Glu Lys Pro
 370 375 380
 Tyr Glu Cys Arg Glu Cys Gly Lys Ala Phe Cys Cys Ser Ser His Leu
 385 390 395 400
 Thr Gln His Gln Arg Ile His Ser Met Lys Lys Lys Tyr Glu Cys Asn
 405 410 415
 Lys Cys Leu Lys Val Phe Ser Ser Phe Ser Phe Leu Val Gln His Gln
 420 425 430
 Ser Ile His Thr Glu Glu Lys Pro Phe Glu Val
 435 440

<210> 4782

<211> 649

<212> PRT

<213> Homo sapiens

<400> 4782

Met Met Trp Gln Cys His Leu Ser Ala Gln Asp Tyr Arg Tyr Tyr Pro
 1 5 10 15
 Val Asp Gly Tyr Ser Leu Leu Lys Arg Phe Pro Leu His Pro Leu Thr
 20 25 30
 Gly Pro Arg Cys Pro Val Gln Thr Val Gly Gln Trp Leu Glu Ser Ile
 35 40 45
 Gly Leu Pro Gln Tyr Glu Asn His Leu Met Ala Asn Gly Phe Asp Asn
 50 55 60
 Val Gln Phe Met Gly Ser Asn Val Met Glu Asp Gln Asp Leu Leu Glu
 65 70 75 80

Ile Gly Ile Leu Asn Ser Gly His Arg Gln Arg Ile Leu Gln Ala Ile
 85 90 95
 Gln Leu Leu Pro Lys Met Arg Pro Ile Gly His Asp Gly Tyr His Pro
 100 105 110
 Thr Ser Val Ala Glu Trp Leu Asp Ser Ile Glu Leu Gly Asp Tyr Thr
 115 120 125
 Lys Ala Phe Leu Ile Asn Gly Tyr Thr Ser Met Asp Leu Leu Lys Lys
 130 135 140
 Ile Trp Glu Val Glu Leu Ile Asn Glu Trp Asn Ile Thr Lys Leu Ser
 145 150 155 160
 Ile Glu Tyr Asp Ser Glu Pro Phe Gly Lys Glu Arg Asp Ala Ala Ile
 165 170 175
 Lys Lys Leu Ala Thr Glu Ala Gly Val Glu Val Ile Val Arg Ile Ser
 180 185 190
 His Thr Leu Tyr Asp Leu Asp Lys Ile Ile Glu Leu Asn Gly Gly Gln
 195 200 205
 Pro Pro Leu Thr Tyr Lys Arg Phe Gln Thr Leu Ile Ser Lys Met Glu
 210 215 220
 Pro Leu Glu Ile Pro Val Glu Thr Ile Thr Ser Glu Val Ile Glu Lys
 225 230 235 240
 Cys Thr Thr Pro Leu Ser Asp Asp His Asp Glu Lys Tyr Gly Val Pro
 245 250 255
 Ser Leu Glu Glu Leu Gly Phe Asp Thr Asp Gly Leu Ser Ser Ala Val
 260 265 270
 Trp Pro Gly Gly Glu Thr Glu Ala Leu Thr Arg Leu Glu Arg His Leu
 275 280 285
 Glu Arg Lys Ala Trp Val Ala Asn Phe Glu Arg Pro Arg Met Asn Ala
 290 295 300
 Asn Ser Leu Leu Ala Ser Pro Thr Gly Leu Ser Pro Tyr Leu Arg Phe
 305 310 315 320
 Gly Cys Leu Ser Cys Arg Leu Phe Tyr Phe Lys Leu Thr Asp Leu Tyr
 325 330 335
 Lys Lys Val Lys Lys Asn Ser Ser Pro Pro Leu Ser Leu Tyr Gly Gln
 340 345 350
 Leu Leu Trp Arg Glu Phe Phe Tyr Thr Ala Ala Thr Asn Asn Pro Arg
 355 360 365

Phe Asp Lys Met Glu Gly Asn Pro Ile Cys Val Gln Ile Pro Trp Asp
 370 375 380
 Lys Asn Pro Glu Ala Leu Ala Lys Trp Ala Glu Gly Arg Thr Gly Phe
 385 390 395 400
 Pro Trp Ile Asp Ala Ile Met Thr Gln Leu Arg Gln Glu Gly Trp Ile
 405 410 415
 His His Leu Ala Arg His Ala Val Ala Cys Phe Leu Thr Arg Gly Asp
 420 425 430
 Leu Trp Ile Ser Trp Glu Glu Gly Met Lys Val Phe Glu Glu Leu Leu
 435 440 445
 Leu Asp Ala Asp Trp Ser Ile Asn Ala Gly Ser Trp Met Trp Leu Ser
 450 455 460
 Cys Ser Ser Phe Phe Gln Gln Phe Phe His Cys Tyr Cys Pro Val Gly
 465 470 475 480
 Phe Gly Arg Arg Thr Asp Pro Asn Gly Asp Tyr Ile Arg Arg Tyr Leu
 485 490 495
 Pro Val Leu Arg Gly Phe Pro Ala Lys Tyr Ile Tyr Asp Pro Trp Asn
 500 505 510
 Ala Pro Glu Gly Ile Gln Lys Val Ala Lys Cys Leu Ile Gly Val Asn
 515 520 525
 Tyr Pro Lys Pro Met Val Asn His Ala Glu Ala Ser Arg Leu Asn Ile
 530 535 540
 Glu Arg Met Lys Gln Ile Tyr Gln Gln Leu Ser Arg Tyr Arg Gly Leu
 545 550 555 560
 Gly Leu Leu Ala Ser Val Pro Ser Asn Pro Asn Gly Asn Gly Gly Phe
 565 570 575
 Met Gly Tyr Ser Ala Glu Asn Ile Pro Gly Cys Ser Ser Ser Gly Ser
 580 585 590
 Cys Ser Gln Gly Ser Gly Ile Leu His Tyr Ala His Gly Asp Ser Gln
 595 600 605
 Gln Thr His Leu Leu Lys Gln Gly Arg Ser Ser Met Gly Thr Gly Leu
 610 615 620
 Ser Gly Gly Lys Arg Pro Ser Gln Glu Glu Asp Thr Gln Ser Ile Gly
 625 630 635 640
 Pro Lys Val Gln Arg Gln Ser Thr Asn
 645

<210> 4783

<211> 337

<212> PRT

<213> Homo sapiens

<400> 4783

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Met Pro Gly Leu Pro Cys Pro Ala Leu Pro Cys Pro Ala Pro Pro Pro
 1             5             10             15
Ala Pro Ser Cys Leu Ile Ala Met Ala Leu Lys Asn Ser Lys Thr Gly
      20             25             30
Ser Leu Pro Val Ser Glu Ile Tyr Ser Phe Met Lys Glu His Phe Pro
      35             40             45
Tyr Phe Lys Thr Ala Pro Asp Gly Trp Lys Asn Ser Val Arg His Asn
      50             55             60
Leu Ser Leu Asn Lys Cys Phe Glu Lys Val Glu Asn Lys Met Ser Gly
      65             70             75             80
Ser Ser Arg Lys Gly Cys Leu Trp Ala Leu Asn Leu Ala Arg Ile Asp
      85             90             95
Lys Met Glu Glu Glu Met His Lys Trp Lys Arg Lys Asp Leu Ala Ala
      100            105            110
Ile His Arg Ser Met Ala Asn Pro Glu Glu Leu Asp Lys Leu Ile Ser
      115            120            125
Asp Arg Pro Glu Ser Cys Arg Arg Pro Gly Lys Pro Gly Glu Pro Glu
      130            135            140
Ala Pro Val Leu Thr His Ala Thr Thr Val Ala Val Ala His Gly Cys
      145            150            155            160
Leu Ala Val Ser Gln Leu Pro Pro Gln Pro Leu Met Thr Leu Ser Leu
      165            170            175
Gln Ser Val Pro Leu His His Gln Val Gln Pro Gln Ala His Leu Ala
      180            185            190
Pro Asp Ser Pro Ala Pro Ala Gln Thr Pro Pro Leu His Ala Leu Pro
      195            200            205
Asp Leu Ser Pro Ser Pro Leu Pro His Pro Ala Met Gly Arg Ala Pro
      210            215            220

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<211> 594

<212> PRT

<213> Homo sapiens

<400> 4784

Met	Glu	Cys	Tyr	Tyr	Ile	Val	Ile	Ser	Ser	Thr	His	Leu	Ser	Asn	Gly
1				5				10						15	
His	Phe	Arg	Asn	Ile	Lys	Gly	Val	Phe	Arg	Gly	Pro	Leu	Ser	Lys	Asn
			20					25					30		
Gly	Asn	Lys	Thr	Leu	Asp	Tyr	Ala	Glu	Lys	Glu	Asn	Thr	Ile	Ala	Lys
			35				40					45			
Ala	Leu	Glu	Asp	Leu	Lys	Ala	Asn	Phe	Tyr	Cys	Glu	Leu	Cys	Asp	Lys
	50						55				60				
Gln	Tyr	Tyr	Lys	His	Gln	Glu	Phe	Asp	Asn	His	Ile	Asn	Ser	Tyr	Asp
65				70						75				80	
His	Ala	His	Lys	Gln	Arg	Leu	Lys	Glu	Leu	Lys	Gln	Arg	Glu	Phe	Ala
				85						90				95	

Arg Asn Val Ala Ser Lys Ser Arg Lys Asp Glu Arg Lys Gln Glu Lys
 100 105 110
 Ala Leu Gln Arg Leu His Lys Leu Ala Glu Leu Arg Lys Glu Thr Val
 115 120 125
 Cys Ala Pro Gly Ser Gly Pro Met Phe Lys Ser Thr Thr Val Thr Val
 130 135 140
 Arg Glu Asn Cys Asn Glu Ile Ser Gln Arg Val Val Val Asp Ser Val
 145 150 155 160
 Asn Asn Gln Gln Asp Phe Lys Tyr Thr Leu Ile His Ser Glu Glu Asn
 165 170 175
 Thr Lys Asp Ala Thr Thr Val Ala Glu Asp Pro Glu Ser Ala Asn Asn
 180 185 190
 Tyr Thr Ala Lys Asn Asn Gln Val Gly Asp Gln Ala Gln Gly Ile His
 195 200 205
 Arg His Lys Ile Gly Phe Ser Phe Ala Phe Pro Lys Lys Ala Ser Val
 210 215 220
 Lys Leu Glu Ser Ser Ala Ala Ala Phe Ser Glu Tyr Ser Asp Asp Ala
 225 230 235 240
 Ser Val Gly Lys Gly Phe Ser Arg Lys Ser Arg Phe Val Pro Ser Ala
 245 250 255
 Cys His Leu Gln Leu Ser Ser Pro Thr Asp Val Leu Leu Ser Ser Glu
 260 265 270
 Glu Lys Thr Asn Ser Phe His Pro Pro Glu Ala Met Cys Arg Asp Lys
 275 280 285
 Glu Thr Val Gln Thr Gln Glu Ile Lys Glu Val Ser Ser Glu Lys Asp
 290 295 300
 Ala Leu Leu Leu Pro Ser Phe Cys Lys Phe Gln Leu Gln Leu Ser Ser
 305 310 315 320
 Asp Ala Asp Asn Cys Gln Asn Ser Val Pro Leu Ala Asp Gln Ile Pro
 325 330 335
 Leu Glu Ser Val Val Ile Asn Glu Asp Ile Pro Val Ser Gly Asn Ser
 340 345 350
 Phe Glu Leu Leu Gly Asn Lys Ser Thr Val Leu Asp Met Ser Asn Asp
 355 360 365
 Cys Ile Ser Val Gln Ala Thr Thr Glu Glu Asn Val Lys His Asn Glu
 370 375 380

Ala Ser Thr Thr Glu Val Glu Asn Lys Asn Gly Pro Glu Thr Leu Ala
 385 390 395 400
 Pro Ser Asn Thr Glu Glu Val Asn Ile Thr Ile His Lys Lys Thr Asn
 405 410 415
 Phe Cys Lys Arg Gln Cys Glu Pro Phe Val Pro Val Leu Asn Lys His
 420 425 430
 Arg Ser Thr Val Leu Gln Trp Pro Ser Glu Met Leu Val Tyr Thr Thr
 435 440 445
 Thr Lys Pro Ser Ile Ser Tyr Ser Cys Asn Pro Leu Cys Phe Asp Phe
 450 455 460
 Lys Ser Thr Lys Val Asn Asn Asn Leu Asp Lys Asn Lys Pro Asp Leu
 465 470 475 480
 Lys Asp Leu Cys Ser Gln Gln Lys Gln Glu Asp Ile Cys Met Gly Pro
 485 490 495
 Leu Ser Asp Tyr Lys Asp Val Ser Thr Glu Gly Leu Thr Asp Tyr Glu
 500 505 510
 Ile Gly Ser Ser Lys Asn Lys Cys Ser Gln Val Thr Pro Leu Leu Ala
 515 520 525
 Asp Asp Ile Leu Ser Ser Ser Cys Asp Ser Gly Lys Asn Lys Asn Thr
 530 535 540
 Gly Gln Arg Tyr Lys Asn Ile Ser Cys Lys Ile Arg Glu Thr Glu Lys
 545 550 555 560
 Tyr Asn Phe Thr Lys Ser Gln Ile Lys Gln Asp Thr Leu Asp Glu Lys
 565 570 575
 Tyr Asn Lys Ile Arg Leu Lys Glu Thr His Glu Tyr Trp Phe His Lys
 580 585 590
 Ser Arg

<210> 4785

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4785

Met Ile Thr Phe Tyr Phe Leu Phe Leu Phe Ser Phe Leu Ser Phe Phe
 1 5 10 15
 Phe Phe Phe Phe Phe Glu Thr Glu Phe Cys Ser Ser Cys Pro Gly Trp
 20 25 30
 Ser Asn Gly Thr Ile Leu Ala His Arg Asn Leu His Leu Pro Gly Ser
 35 40 45
 Ser Asp Ser Pro Pro Ser Ala Phe Pro Ser Ser Trp Asp Tyr Arg His
 50 55 60
 Ala Pro Pro Ser Pro Ala Asn Phe Val Phe Leu Val Asp Met Gly Leu
 65 70 75 80
 Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Pro
 85 90 95
 Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys
 100 105 110
 Ala Arg Pro Leu Phe Ser
 115

<210> 4786

<211> 491

<212> PRT

<213> Homo sapiens

<400> 4786

Met Ala Tyr Leu Tyr Ser Ser Asp Ala Phe Leu Glu Gly Tyr Val Gln
 1 5 10 15
 Gln Phe Leu Tyr Thr Phe Arg Tyr Phe Cys Thr Pro His Asp Phe Leu
 20 25 30
 His Phe Leu Leu Asp Arg Ile Asn Ser Thr Leu Thr Arg Ala His Gln
 35 40 45
 Asp Pro Thr Ser Thr Phe Thr Lys Ile Tyr Arg Arg Ser Leu Cys Val
 50 55 60
 Leu Gln Ala Trp Val Glu Asp Cys Tyr Ala Val Asp Phe Pro Arg Asn
 65 70 75 80
 Ser Gly Leu Leu Gly Lys Leu Glu Asp Phe Ile Ser Ser Lys Ile Leu
 85 90 95

Pro Leu Asp Gly Ser Ala Lys His Leu Leu Gly Leu Leu Glu Val Gly
 100 105 110
 Met Asp Arg Arg Ala Glu Gly Asn Pro Arg Gly Thr Asp Leu Glu Asn
 115 120 125
 Pro Arg Glu Ala Glu Glu Asp Ala Arg Pro Phe Asn Ala Leu Cys Lys
 130 135 140
 Arg Leu Ser Glu Asp Gly Ile Ser Arg Lys Ser Phe Pro Trp Arg Leu
 145 150 155 160
 Pro Arg Gly Asn Gly Leu Val Leu Pro Pro His Lys Glu Arg Pro Tyr
 165 170 175
 Thr Ile Ala Ala Ala Leu Pro Lys Pro Cys Phe Leu Glu Asp Phe Tyr
 180 185 190
 Gly Pro Cys Ala Lys Thr Ser Glu Lys Gly Pro Tyr Phe Leu Thr Glu
 195 200 205
 Tyr Ser Thr His Gln Leu Phe Ser Gln Leu Thr Leu Leu Gln Gln Glu
 210 215 220
 Leu Phe Gln Lys Cys His Pro Val His Phe Leu Asn Ser Arg Ala Leu
 225 230 235 240
 Gly Val Met Asp Lys Ser Thr Ala Ile Pro Lys Ala Ser Ser Ser Glu
 245 250 255
 Ser Leu Ser Ala Lys Thr Cys Ser Leu Phe Leu Pro Asn Tyr Val Gln
 260 265 270
 Asp Lys Tyr Leu Leu Gln Leu Leu Arg Asn Ala Asp Asp Val Ser Thr
 275 280 285
 Trp Val Ala Ala Glu Ile Val Thr Ser His Thr Ser Lys Leu Gln Val
 290 295 300
 Asn Leu Leu Ser Lys Phe Leu Leu Ile Ala Lys Ser Cys Tyr Glu Gln
 305 310 315 320
 Arg Asn Phe Ala Thr Ala Met Gln Ile Leu Ser Gly Leu Glu His Leu
 325 330 335
 Ala Val Arg Gln Ser Pro Ala Trp Arg Ile Leu Pro Ala Lys Ile Ala
 340 345 350
 Glu Val Met Glu Glu Leu Lys Ala Val Glu Val Phe Leu Lys Ser Asp
 355 360 365
 Ser Leu Cys Leu Met Glu Gly Arg Arg Phe Arg Ala Gln Pro Thr Leu
 370 375 380

Pro Ser Ala His Leu Leu Ala Met His Ile Gln Gln Leu Glu Thr Gly
 385 390 395 400
 Gly Phe Thr Met Thr Asn Gly Ala His Arg Trp Ser Lys Leu Arg Asn
 405 410 415
 Ile Ala Lys Val Val Ser Gln Val His Ala Phe Gln Glu Asn Pro Tyr
 420 425 430
 Thr Phe Ser Pro Asp Pro Lys Leu Gln Ser Tyr Leu Lys Gln Arg Ile
 435 440 445
 Ala Arg Phe Ser Gly Ala Asp Ile Ser Thr Leu Ala Ala Asp Ser Arg
 450 455 460
 Ala Asn Phe His Gln Val Ser Ser Glu Lys His Ser Arg Lys Ile Gln
 465 470 475 480
 Asp Lys Leu Arg Arg Met Lys Ala Thr Phe Gln
 485 490

<210> 4787

<211> 415

<212> PRT

<213> Homo sapiens

<400> 4787

Met Val Ala Tyr Ser Val Gln Val Leu Ala Val Phe Ile Ser Cys Ala
 1 5 10 15
 Ile Leu Thr Leu Ala Met Lys Ile Ala Trp Ile Phe Gly Leu Asn Ser
 20 25 30
 Val Gln Asn Ile Thr Ala Asn Leu Ser Val Asp Gly Ser Thr Ser Gly
 35 40 45
 Asn Pro Ile Gln Lys Trp Lys Arg Lys Ile Asp Ala Asn Cys Thr Ala
 50 55 60
 Arg Leu Arg Thr Leu Asn Phe Phe Phe Ala Met Ser Gly Lys Val Lys
 65 70 75 80
 Asp Gly Thr Pro Cys Ser Pro Asn Lys Asn Asp Val Cys Ile Asp Gly
 85 90 95
 Val Cys Glu Leu Val Gly Cys Asp His Glu Leu Gly Ser Lys Ala Val
 100 105 110

Ser Asp Ala Cys Gly Val Cys Lys Gly Asp Asn Ser Thr Cys Lys Phe
 115 120 125
 Tyr Lys Gly Leu Tyr Leu Asn Gln His Lys Ala Asn Glu Tyr Tyr Pro
 130 135 140
 Val Val Leu Ile Pro Ala Gly Ala Arg Ser Ile Glu Ile Gln Glu Leu
 145 150 155 160
 Gln Val Ser Ser Ser Tyr Leu Ala Val Arg Ser Leu Ser Gln Lys His
 165 170 175
 Tyr Leu Thr Gly Gly Trp Ser Ile Asp Trp Pro Gly Glu Phe Pro Phe
 180 185 190
 Ala Gly Thr Thr Phe Glu Tyr Gln Arg Ser Phe Asn Arg Pro Glu Arg
 195 200 205
 Leu Tyr Ala Pro Gly Pro Thr Asn Glu Thr Leu Val Phe Glu Ile Leu
 210 215 220
 Met Gln Gly Lys Asn Pro Gly Ile Ala Trp Lys Tyr Ala Leu Pro Lys
 225 230 235 240
 Val Met Asn Gly Thr Pro Pro Ala Thr Lys Arg Pro Ala Tyr Thr Trp
 245 250 255
 Ser Ile Val Gln Ser Glu Cys Ser Val Ser Cys Gly Gly Gly Tyr Ile
 260 265 270
 Asn Val Lys Ala Ile Cys Leu Arg Asp Gln Asn Thr Gln Val Asn Ser
 275 280 285
 Ser Phe Cys Ser Ala Lys Thr Lys Pro Val Thr Glu Pro Lys Ile Cys
 290 295 300
 Asn Arg Arg Ala Cys Pro Ala His Pro Val Tyr Asn Met Val Ala Gly
 305 310 315 320
 Trp Tyr Ser Leu Pro Trp Gln Gln Cys Thr Val Thr Cys Gly Gly Gly
 325 330 335
 Val Gln Thr Arg Ser Val His Cys Val Gln Gln Gly Arg Pro Ser Ser
 340 345 350
 Ser Cys Leu Leu His Gln Lys Pro Pro Val Leu Arg Ala Cys Asn Thr
 355 360 365
 Asn Phe Cys Pro Ala Pro Glu Lys Arg Glu Asp Pro Ser Cys Val Asp
 370 375 380
 Phe Phe Asn Trp Cys His Leu Val Pro Gln His Gly Val Cys Asn His
 385 390 395 400

Lys Phe Tyr Gly Lys Gln Cys Cys Lys Ser Cys Thr Arg Lys Ile
 405 410 415

<210> 4788

<211> 974

<212> PRT

<213> Homo sapiens

<400> 4788

Met Arg Arg Ala Gly Ile Gly Glu Asp Ser Arg Leu Gly Leu Gln Ala
 1 5 10 15
 Gln Pro Gly Ala Glu Pro Ser Pro Gly Arg Ala Gly Thr Glu Arg Ser
 20 25 30
 Leu Gly Gly Ala Gln Gly Pro Gly Gln Pro Cys Ser Cys Pro Gly Ala
 35 40 45
 Met Ala Ser Ala Val Arg Gly Ser Arg Pro Trp Pro Arg Leu Gly Leu
 50 55 60
 Gln Leu Gln Phe Ala Ala Leu Leu Leu Gly Thr Leu Ser Pro Gln Val
 65 70 75 80
 His Thr Leu Arg Pro Glu Asn Leu Leu Leu Val Ser Thr Leu Asp Gly
 85 90 95
 Ser Leu His Ala Leu Ser Lys Gln Thr Gly Asp Leu Lys Trp Thr Leu
 100 105 110
 Arg Asp Asp Pro Val Ile Glu Gly Pro Met Tyr Val Thr Glu Met Ala
 115 120 125
 Phe Leu Ser Asp Pro Ala Asp Gly Ser Leu Tyr Ile Leu Gly Thr Gln
 130 135 140
 Lys Gln Gln Gly Leu Met Lys Leu Pro Phe Thr Ile Pro Glu Leu Val
 145 150 155 160
 His Ala Ser Pro Cys Arg Ser Ser Asp Gly Val Phe Tyr Thr Gly Arg
 165 170 175
 Lys Gln Asp Ala Trp Phe Val Val Asp Pro Glu Ser Gly Glu Thr Gln
 180 185 190
 Met Thr Leu Thr Thr Glu Gly Pro Ser Thr Pro Arg Leu Tyr Ile Gly
 195 200 205

Arg Thr Gln Tyr Thr Val Thr Met His Asp Pro Arg Ala Pro Ala Leu
 210 215 220
 Arg Trp Asn Thr Thr Tyr Arg Arg Tyr Ser Ala Pro Pro Met Asp Gly
 225 230 235 240
 Ser Pro Gly Lys Tyr Met Ser His Leu Ala Ser Cys Gly Met Gly Leu
 245 250 255
 Leu Leu Thr Val Asp Pro Gly Ser Gly Thr Val Leu Trp Thr Gln Asp
 260 265 270
 Leu Gly Val Pro Val Met Gly Val Tyr Thr Trp His Gln Asp Gly Leu
 275 280 285
 Arg Gln Leu Pro His Leu Thr Leu Ala Arg Asp Thr Leu His Phe Leu
 290 295 300
 Ala Leu Arg Trp Gly His Ile Arg Leu Pro Ala Ser Gly Pro Arg Asp
 305 310 315 320
 Thr Ala Thr Leu Phe Ser Thr Leu Asp Thr Gln Leu Leu Met Thr Leu
 325 330 335
 Tyr Val Gly Lys Asp Glu Thr Gly Phe Tyr Val Ser Lys Ala Leu Val
 340 345 350
 His Thr Gly Val Ala Leu Val Pro Arg Gly Leu Thr Leu Ala Pro Ala
 355 360 365
 Asp Gly Pro Thr Thr Asp Glu Val Thr Leu Gln Val Ser Gly Glu Arg
 370 375 380
 Glu Gly Ser Pro Ser Thr Ala Val Arg Tyr Pro Ser Gly Ser Val Ala
 385 390 395 400
 Leu Pro Ser Gln Trp Leu Leu Ile Gly His His Glu Leu Pro Pro Val
 405 410 415
 Leu His Thr Thr Met Leu Arg Val His Pro Thr Leu Gly Ser Gly Thr
 420 425 430
 Ala Glu Thr Arg Pro Pro Glu Asn Thr Gln Ala Pro Ala Phe Phe Leu
 435 440 445
 Glu Leu Leu Ser Leu Ser Arg Glu Lys Leu Trp Asp Ser Glu Leu His
 450 455 460
 Pro Glu Glu Lys Thr Pro Asp Ser Tyr Leu Gly Leu Gly Pro Gln Asp
 465 470 475 480
 Leu Leu Ala Ala Ser Leu Thr Ala Val Leu Leu Gly Gly Trp Ile Leu
 485 490 495

Phe Val Met Arg Gln Gln Gln Pro Gln Val Val Glu Lys Gln Gln Glu
 500 505 510
 Thr Pro Leu Ala Pro Ala Asp Phe Ala His Ile Ser Gln Asp Ala Gln
 515 520 525
 Ser Leu His Ser Gly Ala Ser Arg Arg Ser Gln Lys Arg Leu Gln Ser
 530 535 540
 Pro Ser Lys Gln Ala Gln Pro Leu Asp Asp Pro Glu Ala Glu Gln Leu
 545 550 555 560
 Thr Val Val Gly Lys Ile Ser Phe Asn Pro Lys Asp Val Leu Gly Arg
 565 570 575
 Gly Ala Gly Gly Thr Phe Val Phe Arg Gly Gln Phe Glu Gly Arg Ala
 580 585 590
 Val Ala Val Lys Arg Leu Leu Arg Glu Cys Phe Gly Leu Val Arg Arg
 595 600 605
 Glu Val Gln Leu Leu Gln Glu Ser Asp Arg His Pro Asn Val Leu Arg
 610 615 620
 Tyr Phe Cys Thr Glu Arg Gly Pro Gln Phe His Tyr Ile Ala Leu Glu
 625 630 635 640
 Leu Cys Arg Ala Ser Leu Gln Glu Tyr Val Glu Asn Pro Asp Leu Asp
 645 650 655
 Arg Gly Gly Leu Glu Pro Glu Val Val Leu Gln Gln Leu Met Ser Gly
 660 665 670
 Leu Ala His Leu His Ser Leu His Ile Val His Arg Asp Leu Lys Pro
 675 680 685
 Gly Asn Ile Leu Ile Thr Gly Pro Asp Ser Gln Gly Leu Gly Arg Val
 690 695 700
 Val Leu Ser Asp Phe Gly Leu Cys Lys Lys Leu Pro Ala Gly Arg Cys
 705 710 715 720
 Ser Phe Ser Leu His Ser Gly Ile Pro Gly Thr Glu Gly Trp Met Ala
 725 730 735
 Pro Glu Leu Leu Gln Leu Leu Pro Pro Asp Ser Pro Thr Ser Ala Val
 740 745 750
 Asp Ile Phe Ser Ala Gly Cys Val Phe Tyr Tyr Val Leu Ser Gly Gly
 755 760 765
 Ser His Pro Phe Gly Asp Ser Leu Tyr Arg Gln Ala Asn Ile Leu Thr
 770 775 780

Gly Ala Pro Cys Leu Ala His Leu Glu Glu Glu Val His Asp Lys Val
 785 790 795 800
 Val Ala Arg Asp Leu Val Gly Ala Met Leu Ser Pro Leu Pro Gln Pro
 805 810 815
 Arg Pro Ser Ala Pro Gln Val Leu Ala His Pro Phe Phe Trp Ser Arg
 820 825 830
 Ala Lys Gln Leu Gln Phe Phe Gln Asp Val Ser Asp Trp Leu Glu Lys
 835 840 845
 Glu Ser Glu Gln Glu Pro Leu Val Arg Ala Leu Glu Ala Gly Gly Cys
 850 855 860

 Ala Val Val Arg Asp Asn Trp His Glu His Ile Ser Met Pro Leu Gln
 865 870 875 880
 Thr Asp Leu Arg Lys Phe Arg Ser Tyr Lys Gly Thr Ser Val Arg Asp
 885 890 895
 Leu Leu Arg Ala Val Arg Asn Lys Lys His His Tyr Arg Glu Leu Pro
 900 905 910
 Val Glu Val Arg Gln Ala Leu Gly Gln Val Pro Asp Gly Phe Val Gln
 915 920 925
 Tyr Phe Thr Asn Arg Phe Pro Arg Leu Leu Leu His Thr His Arg Ala
 930 935 940
 Met Arg Ser Cys Ala Ser Glu Ser Leu Phe Leu Pro Tyr Tyr Pro Pro
 945 950 955 960
 Asp Ser Glu Ala Arg Arg Pro Cys Pro Gly Ala Thr Gly Arg
 965 970

<210> 4789

<211> 794

<212> PRT

<213> Homo sapiens

<400> 4789

Met Glu Gly Ser Leu Ala Gly Ser Leu Ala Ala Pro Asp Arg Pro Gln
 1 5 10 15
 Gly Pro Glu Arg Leu Pro Gly Pro Ala Pro Arg Glu Asn Ile Glu Gly

	20		25		30
Gly	Ala	Glu	Ala	Ala	Glu
		Gly	Glu	Gly	Gly
			Ile	Phe	Arg
			Ser	Thr	Arg
	35		40		45
Tyr	Leu	Pro	Val	Thr	Lys
		Glu	Gly	Pro	Arg
		Asp	Ile	Leu	Asp
		Gly	Arg		
	50		55		60
Gly	Gly	Ile	Ser	Val	Ala
		Asn	Phe	Asp	Pro
		Gly	Thr	Phe	Ser
		Leu	Met		
	65		70		75
					80
Arg	Cys	Asp	Phe	Cys	Gly
		Ala	Gly	Phe	Asp
		Thr	Arg	Ala	Gly
		Leu	Ser		
		85		90	
					95
Ser	His	Ala	Arg	Ala	His
		Leu	Arg	Asp	Phe
		Gly	Ile	Thr	Asn
		Trp	Glu		
	100		105		110
Leu	Thr	Val	Ser	Pro	Ile
		Asn	Ile	Leu	Gln
		Glu	Leu	Leu	Ala
		Thr	Ser		
	115		120		125
Ala	Ala	Glu	Gln	Pro	Pro
		Ser	Pro	Leu	Gly
		Arg	Glu	Pro	Gly
		Gly	Pro		
	130		135		140
Pro	Gly	Ser	Phe	Leu	Thr
		Ser	Arg	Arg	Pro
		Arg	Leu	Pro	Leu
		Thr	Val		
	145		150		155
					160
Pro	Phe	Pro	Pro	Thr	Trp
		Ala	Glu	Asp	Pro
		Gly	Pro	Ala	Tyr
		Gly	Asp		
		165		170	
					175
Ala	Ser	Gly	Pro	Glu	Pro
		Ala	Arg	Asp	Ile
		Arg	Cys	Glu	Phe
		Cys	Gly		
	180		185		190
Glu	Phe	Phe	Glu	Asn	Arg
		Lys	Gly	Leu	Ser
		Ser	His	Ala	Arg
		Ser	His		
	195		200		205
Leu	Arg	Gln	Met	Gly	Val
		Thr	Glu	Trp	Tyr
		Val	Asn	Gly	Ser
		Pro	Ile		
	210		215		220
Asp	Thr	Leu	Arg	Glu	Ile
		Leu	Lys	Arg	Arg
		Thr	Gln	Ser	Arg
		Pro	Gly		
	225		230		235
					240
Gly	Pro	Pro	Asn	Pro	Pro
		Gly	Pro	Ser	Pro
		Lys	Ala	Leu	Ala
		Lys	Met		
		245		250	
					255
Met	Gly	Gly	Ala	Gly	Pro
		Gly	Ser	Ser	Leu
		Glu	Ala	Arg	Ser
		Pro	Ser		
	260		265		270
Asp	Leu	His	Ile	Ser	Pro
		Leu	Ala	Lys	Lys
		Leu	Pro	Pro	Pro
		Pro	Gly		
	275		280		285
Ser	Pro	Leu	Gly	His	Ser
		Pro	Thr	Ala	Ser
		Pro	Pro	Pro	Thr
		Ala	Arg		
	290		295		300
Lys	Met	Phe	Pro	Gly	Leu
		Ala	Ala	Pro	Ser
		Leu	Pro	Lys	Lys
		Leu	Lys		

305	310	315	320
Pro Glu Gln Ile Arg Val Glu Ile Lys Arg Glu Met Leu Pro Gly Ala			
	325	330	335
Leu His Gly Glu Leu His Pro Ser Glu Gly Pro Trp Gly Ala Pro Arg			
	340	345	350
Glu Asp Met Thr Pro Leu Asn Leu Ser Ser Arg Ala Glu Pro Val Arg			
	355	360	365
Asp Ile Arg Cys Glu Phe Cys Gly Glu Phe Phe Glu Asn Arg Lys Gly			
	370	375	380
Leu Ser Ser His Ala Arg Ser His Leu Arg Gln Met Gly Val Thr Glu			
385	390	395	400
Trp Ser Val Asn Gly Ser Pro Ile Asp Thr Leu Arg Glu Ile Leu Lys			
	405	410	415
Lys Lys Ser Lys Pro Cys Leu Ile Lys Lys Glu Pro Pro Ala Gly Asp			
	420	425	430
Leu Ala Pro Ala Leu Ala Glu Asp Gly Pro Pro Thr Val Ala Pro Gly			
	435	440	445
Pro Val Gln Ser Pro Leu Pro Leu Ser Pro Leu Ala Gly Arg Pro Gly			
	450	455	460
Lys Pro Gly Ala Gly Pro Ala Gln Val Pro Arg Glu Leu Ser Leu Thr			
465	470	475	480
Pro Ile Thr Gly Ala Lys Pro Ser Ala Thr Gly Tyr Leu Gly Ser Val			
	485	490	495
Ala Ala Lys Arg Pro Leu Gln Glu Asp Arg Leu Leu Pro Ala Glu Val			
	500	505	510
Lys Ala Lys Ala Tyr Ile Gln Thr Glu Leu Pro Phe Lys Ala Lys Thr			
	515	520	525
Leu His Glu Lys Thr Ser His Ser Ser Thr Glu Ala Cys Cys Glu Leu			
	530	535	540
Cys Gly Leu Tyr Phe Glu Asn Arg Lys Ala Leu Ala Ser His Ala Arg			
545	550	555	560
Ala His Leu Arg Gln Phe Gly Val Thr Glu Trp Cys Val Asn Gly Ser			
	565	570	575
Pro Ile Glu Thr Leu Ser Glu Trp Ile Lys His Arg Pro Gln Lys Val			
	580	585	590
Gly Ala Tyr Arg Ser Tyr Ile Gln Gly Gly Arg Pro Phe Thr Lys Lys			

595	600	605
Phe Arg Ser Ala Gly His Gly	Arg Asp Ser Asp Lys	Arg Pro Ser Leu
610	615	620
Gly Leu Ala Pro Gly Gly Leu	Ala Val Val Gly Arg Ser	Ala Gly Gly
625	630	635
Glu Pro Gly Pro Glu Ala Gly	Arg Ala Ala Asp Gly Gly	Glu Arg Pro
645	650	655
Leu Ala Ala Ser Pro Pro Gly	Thr Val Lys Ala Glu Glu	His Gln Arg
660	665	670
Gln Asn Ile Asn Lys Phe Glu	Arg Arg Gln Ala Arg Pro	Pro Asp Ala
675	680	685
Ser Ala Ala Arg Gly Gly Glu	Asp Thr Asn Asp Leu Gln	Gln Lys Leu
690	695	700
Glu Glu Val Arg Gln Pro Pro	Pro Arg Val Arg Pro Val	Pro Ser Leu
705	710	715
Val Pro Arg Pro Pro Gln Thr	Ser Leu Val Lys Phe Val	Gly Asn Ile
725	730	735
Tyr Thr Leu Lys Cys Arg Phe	Cys Glu Val Glu Phe Gln	Gly Pro Leu
740	745	750
Ser Ile Gln Glu Glu Trp Val	Arg His Leu Gln Arg His	Ile Leu Glu
755	760	765
Met Asn Phe Ser Lys Ala Asp	Pro Pro Pro Glu Glu Ser	Gln Ala Pro
770	775	780
Gln Ala Gln Thr Ala Ala Ala	Glu Ala Pro	
785	790	

<210> 4790

<211> 692

<212> PRT

<213> Homo sapiens

<400> 4790

Met	Lys	Glu	Phe	Leu	Ser	Thr	Ala	Gln	Gly	Asn	Arg	Glu	Val	Phe	His
1				5				10					15		
Ala	Gly	Thr	Leu	Gln	Ile	His	Glu	Ser	His	His	Asn	Gly	Asp	Phe	Cys

	20		25		30										
Tyr	Gln	Asp	Val	Asp	Lys	Asp	Ile	His	Asp	Tyr	Glu	Phe	Gln	Trp	Gln
	35						40						45		
Glu	Asp	Glu	Arg	Asn	Gly	His	Glu	Ala	Pro	Met	Thr	Lys	Ile	Lys	Lys
	50						55						60		
Leu	Thr	Gly	Ser	Thr	Glu	Arg	Tyr	Asp	Gln	Ser	His	Ala	Arg	Asn	Lys
	65						70						75		80
Pro	Ile	Lys	Asp	Gln	Leu	Gly	Ser	Ser	Phe	His	Ser	His	Leu	Pro	Glu
				85					90					95	
Met	His	Ile	Phe	Gln	Thr	Glu	Glu	Lys	Ile	Asp	Asn	Gln	Val	Val	Lys
				100					105					110	
Ser	Ile	His	Asp	Ala	Ser	Leu	Val	Ser	Thr	Ala	Gln	Arg	Ile	Ser	Cys
				115					120					125	
Arg	Pro	Lys	Thr	His	Ile	Ser	Asn	Asn	His	Gly	Asn	Asn	Phe	Trp	Asn
	130						135						140		
Ser	Ser	Leu	Leu	Thr	Gln	Lys	Gln	Glu	Val	His	Met	Arg	Glu	Lys	Ser
	145						150					155			160
Phe	Gln	Cys	Asn	Glu	Ser	Gly	Lys	Ala	Phe	Asn	Tyr	Ser	Ser	Leu	Leu
				165								170			175
Arg	Lys	His	Gln	Ile	Ile	His	Leu	Ala	Asp	Lys	Tyr	Lys	Cys	Asp	Val
				180								185			190
Cys	Gly	Lys	Leu	Phe	Asn	Gln	Lys	Arg	Asn	Leu	Ala	Cys	His	Arg	Arg
				195								200			205
Cys	His	Thr	Gly	Glu	Asn	Pro	Tyr	Lys	Cys	Asn	Glu	Cys	Gly	Lys	Thr
				210								215			220
Phe	Ser	Gln	Thr	Ser	Ser	Leu	Thr	Cys	His	Arg	Arg	Leu	His	Thr	Gly
	225						230					235			240
Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Glu	Cys	Asp	Lys	Ala	Phe	His	Phe	Lys
				245								250			255
Ser	Ile	Leu	Glu	Arg	His	Ser	Ile	Ile	His	Thr	Glu	Glu	Lys	Pro	Tyr
				260								265			270
Lys	Cys	Asn	Glu	Cys	Gly	Lys	Thr	Phe	Arg	Gln	Lys	Ser	Ile	Leu	Thr
				275								280			285
Arg	His	His	Arg	Leu	His	Thr	Gly	Glu	Lys	Pro	Tyr	Lys	Cys	Asn	Glu
				290								295			300
Cys	Gly	Lys	Thr	Phe	Ser	His	Lys	Ser	Ser	Leu	Thr	Cys	His	His	Arg

305	310	315	320
Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr			
	325	330	335
Phe Ser His Lys Ser Ser Leu Thr Cys His Arg Arg Leu His Thr Gly			
	340	345	350
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Asp Lys Ala Tyr Ser Phe Arg			
	355	360	365
Ser Asn Phe Glu Ile His Arg Lys Ile His Thr Glu Asp Asn Ala Tyr			
	370	375	380
Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Arg Thr Ser Ser Leu Thr			
385	390	395	400
Cys His Arg Arg Arg His Thr Gly Glu Gln Pro Tyr Lys Cys Glu Glu			
	405	410	415
Cys Asp Lys Ala Phe Arg Phe Lys Ser Asn Leu Glu Arg His Arg Arg			
	420	425	430
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr			
	435	440	445
Phe Ser Arg Lys Ser Tyr Leu Thr Cys His His Arg Leu His Thr Gly			
	450	455	460
Glu Lys Ala Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Trp Lys			
465	470	475	480
Ser Ser Leu Thr Cys His Arg Arg Leu His Ser Gly Glu Lys Pro Tyr			
	485	490	495
Lys Cys Lys Glu Cys Gly Lys Thr Phe Asn Gln Gln Leu Thr Leu Lys			
	500	505	510
Arg His Arg Arg Leu His Ser Gly Glu Asn Pro Tyr Lys Cys Glu Asp			
	515	520	525
Ser Asp Lys Ala Tyr Ser Phe Lys Ser Asn Leu Glu Ile His Gln Lys			
	530	535	540
Ile His Thr Glu Glu Asn Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr			
545	550	555	560
Phe Ser Arg Thr Ser Ser Leu Thr Cys His Arg Arg Leu His Thr Gly			
	565	570	575
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Asp Lys Ala Phe Arg Val Lys			
	580	585	590

Ser Asn Leu Glu Gly His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr
 595 600 605
 Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Arg Lys Ser Tyr Phe Ile
 610 615 620
 Cys His His Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu
 625 630 635 640
 Cys Gly Lys Asn Phe Ser Gln Lys Ser Ser Leu Ile Cys His His Arg
 645 650 655
 Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr
 660 665 670
 Phe Ser Gln Lys Ser Asn Leu Thr Cys His Arg Arg Leu His Thr Gly
 675 680 685
 Glu Lys Gln Val
 690

<210> 4791

<211> 872

<212> PRT

<213> Homo sapiens

<400> 4791

Met Gly Ile Val Trp Ile Leu Met Ser Val Leu Pro Trp Trp Gly Arg
 1 5 10 15
 Cys Ala Asp Leu Ala Ile Ala Ser Thr Gln Leu Val Pro Ser Thr Ala
 20 25 30
 Ser Ala Arg Met Ala Leu Ser Ser Gln Leu Met Gly Arg Thr Val Trp
 35 40 45
 Thr Pro Met Ser Ala Ser Ala Leu Gln Glu Pro Ala Tyr Gln Ala Leu
 50 55 60
 Ala Arg Thr Ser Arg Ala Pro Ser Ala Ala Ser Val Pro Met Ala Ser
 65 70 75 80
 Arg Cys Arg Val Thr Thr Ala Leu Ile Ser Thr Ser Ala Gln Arg Ser
 85 90 95
 Pro Thr Ser Ala Ser Leu Ala Pro Val Pro Thr Ala Leu Gly Ala Ser
 100 105 110

Ser Ala Ser Ala His Leu Ala Leu Ser Ser Leu Thr Met Gly Thr Val
 115 120 125
 Ala Leu Thr His Gly Arg Val Ser Ala Ser Pro Val Leu Arg Leu Gly
 130 135 140
 Ser Ala Arg Cys Pro Lys Leu Ser Thr Pro Pro Arg Pro Ala Ala Ala
 145 150 155 160
 Ala Val Arg Gly Leu Gly Arg Ala Gly Glu Thr Pro Ala Asn Cys Val
 165 170 175
 Ser Arg Arg Ala Val Pro Gly Pro Asp Asp Ser Arg Glu Asp Val Asn
 180 185 190
 Glu Cys Ala Glu Asn Pro Gly Val Cys Thr Asn Gly Val Cys Val Asn
 195 200 205
 Thr Asp Gly Ser Phe Arg Cys Glu Cys Pro Phe Gly Tyr Ser Leu Asp
 210 215 220
 Phe Thr Gly Ile Asn Cys Val Asp Thr Asp Glu Cys Ser Val Gly His
 225 230 235 240
 Pro Cys Gly Gln Gly Thr Cys Thr Asn Val Ile Gly Gly Phe Glu Cys
 245 250 255
 Ala Cys Ala Asp Gly Phe Glu Pro Gly Leu Met Met Thr Cys Glu Asp
 260 265 270
 Ile Asp Glu Cys Ser Leu Asn Pro Leu Leu Cys Ala Phe Arg Cys His
 275 280 285
 Asn Thr Glu Gly Ser Tyr Leu Cys Thr Cys Pro Ala Gly Tyr Thr Leu
 290 295 300
 Arg Glu Asp Gly Ala Met Cys Arg Asp Val Asp Glu Cys Ala Asp Gly
 305 310 315 320
 Gln Gln Asp Cys His Ala Arg Gly Met Glu Cys Lys Asn Leu Ile Gly
 325 330 335
 Thr Phe Ala Cys Val Cys Pro Pro Gly Met Arg Pro Leu Pro Gly Ser
 340 345 350
 Gly Glu Gly Cys Thr Asp Asp Asn Glu Cys His Ala Gln Pro Asp Leu
 355 360 365
 Cys Val Asn Gly Arg Cys Val Asn Thr Ala Gly Ser Phe Arg Cys Asp
 370 375 380
 Cys Asp Glu Gly Phe Gln Pro Ser Pro Thr Leu Thr Glu Cys His Asp
 385 390 395 400

Ile Arg Gln Gly Pro Cys Phe Ala Glu Val Leu Gln Thr Met Cys Arg			
	405	410	415
Ser Leu Ser Ser Ser Ser Glu Ala Val Thr Arg Ala Glu Cys Cys Cys			
	420	425	430
Gly Gly Gly Arg Gly Trp Gly Pro Arg Cys Glu Leu Cys Pro Leu Pro			
	435	440	445
Gly Thr Ser Ala Tyr Arg Lys Leu Cys Pro His Gly Ser Gly Tyr Thr			
	450	455	460
Ala Glu Gly Arg Asp Val Asp Glu Cys Arg Met Leu Ala His Leu Cys			
465	470	475	480
Ala His Gly Glu Cys Ile Asn Ser Leu Gly Ser Phe Arg Cys His Cys			
	485	490	495
Gln Ala Gly Tyr Thr Pro Asp Ala Thr Ala Thr Thr Cys Leu Asp Met			
	500	505	510
Asp Glu Cys Ser Gln Val Pro Lys Pro Cys Thr Phe Leu Cys Lys Asn			
	515	520	525
Thr Lys Gly Ser Phe Leu Cys Ser Cys Pro Arg Gly Tyr Leu Leu Glu			
	530	535	540
Glu Asp Gly Arg Thr Cys Lys Asp Leu Asp Glu Cys Thr Ser Arg Gln			
545	550	555	560
His Asn Cys Gln Phe Leu Cys Val Asn Thr Val Gly Ala Phe Thr Cys			
	565	570	575
Arg Cys Pro Pro Gly Phe Thr Gln His His Gln Ala Cys Phe Asp Val			
	580	585	590
Asn Glu Cys Asp Gly Pro His Arg Cys Gln His Gly Cys Gln Asn Gln			
	595	600	605
Leu Gly Gly Tyr Arg Cys Ser Cys Pro Gln Gly Phe Thr Gln His Ser			
	610	615	620
Gln Trp Ala Gln Cys Val Asp Glu Asn Glu Cys Ala Leu Ser Pro Pro			
625	630	635	640
Thr Cys Gly Ser Ala Ser Cys Arg Asn Thr Leu Gly Gly Phe Arg Cys			
	645	650	655
Val Cys Pro Ser Gly Phe Asp Phe Asp Gln Ala Leu Gly Gly Cys Gln			
	660	665	670
Asp Val Asp Glu Cys Ala Gly Arg Arg Gly Pro Cys Ser Tyr Ser Cys			
	675	680	685

Ala Asn Thr Pro Gly Gly Phe Leu Cys Gly Cys Pro Gln Gly Tyr Phe
 690 695 700
 Arg Ala Gly Gln Gly His Cys Val Ser Gly Leu Gly Phe Ser Pro Gly
 705 710 715 720
 Pro Gln Asp Thr Pro Asp Lys Glu Glu Leu Leu Ser Ser Glu Ala Cys
 725 730 735
 Tyr Glu Cys Lys Ile Asn Gly Leu Ser Pro Arg Asp Arg Pro Arg Arg
 740 745 750
 Ser Ala His Arg Asp His Gln Val Asn Leu Ala Thr Leu Asp Ser Glu
 755 760 765
 Ala Leu Leu Thr Leu Gly Leu Asn Leu Ser His Leu Gly Arg Ala Glu
 770 775 780
 Arg Ile Leu Glu Leu Arg Pro Ala Leu Glu Gly Leu Glu Gly Arg Ile
 785 790 795 800
 Arg Tyr Val Ile Val Arg Gly Asn Glu Gln Gly Phe Phe Arg Met His
 805 810 815
 His Leu Arg Gly Val Ser Ser Leu Gln Leu Gly Arg Arg Arg Pro Gly
 820 825 830
 Pro Gly Thr Tyr Arg Leu Glu Val Val Ser His Met Ala Gly Pro Trp
 835 840 845
 Gly Val Gln Pro Glu Gly Gln Pro Gly Pro Trp Gly Gln Ala Leu Arg
 850 855 860
 Leu Lys Val Gln Leu Gln Leu Leu
 865 870

<210> 4792

<211> 1015

<212> PRT

<213> Homo sapiens

<400> 4792

Met Asp Ile Met Ser Ala Gln Ala Ser Ser Gly Ser Thr Ser Val Leu
 1 5 10 15
 Arg Trp Val Leu Ser Cys Leu Ala Thr Leu Leu Arg Lys Gln Asp Leu
 20 25 30

Glu Ala Trp Gly Tyr Pro Val Thr Leu Gln Val Tyr His Gly Leu Leu
 35 40 45
 Ser Phe Thr Val His Pro Lys Pro Lys Leu Val Thr Ala Cys Ala Met
 50 55 60
 Gln Ala Phe His Ser Leu Phe His Ala Arg Pro Gly Leu Ser Thr Leu
 65 70 75 80
 Ser Ala Glu Leu Asn Ala Gln Ile Ile Thr Ala Leu Tyr Asp Tyr Val
 85 90 95
 Pro Ser Glu Asp Asp Leu Gln Pro Leu Leu Ala Trp Leu Lys Val Met
 100 105 110
 Glu Lys Ala His Ile Asn Leu Val Arg Leu Gln Trp Asp Leu Gly Leu
 115 120 125
 Gly His Leu Pro Arg Phe Phe Gly Thr Ala Val Thr Cys Leu Leu Ser
 130 135 140
 Pro His Ser Gln Val Leu Thr Ala Ala Thr Gln Ser Leu Lys Glu Ile
 145 150 155 160
 Leu Lys Glu Cys Val Ala Pro His Met Ala Asp Ile Gly Ser Val Thr
 165 170 175
 Ser Ser Ala Ser Gly Pro Ala Gln Ser Val Ala Lys Met Phe Arg Ala
 180 185 190
 Val Glu Glu Gly Leu Thr Tyr Lys Phe His Ala Ala Trp Ser Ser Val
 195 200 205
 Leu Gln Leu Leu Cys Val Phe Phe Glu Ala Cys Gly Arg Gln Ala His
 210 215 220
 Pro Val Met Arg Lys Cys Leu Gln Ser Leu Cys Asp Leu Arg Leu Ser
 225 230 235 240
 Pro His Phe Pro His Thr Ala Ala Leu Asp Gln Ala Val Gly Ala Ala
 245 250 255
 Val Thr Ser Met Gly Pro Glu Val Val Leu Gln Ala Val Pro Leu Glu
 260 265 270
 Ile Asp Gly Ser Glu Glu Thr Leu Asp Phe Pro Arg Ser Trp Leu Leu
 275 280 285
 Pro Val Ile Arg Asp His Val Gln Glu Thr Arg Leu Gly Phe Phe Thr
 290 295 300
 Thr Tyr Phe Leu Pro Leu Ala Asn Thr Leu Lys Ser Lys Ala Met Asp
 305 310 315 320

Phe Gly Ser Asn Gln Glu Glu Ala Leu Gln Cys Tyr Leu Val Leu Ile
 610 615 620
 Tyr Pro Gly Leu Val Gly Ala Val Thr Met Val Ser Cys Ser Ile Leu
 625 630 635 640
 Ala Leu Thr His Leu Leu Phe Glu Phe Lys Gly Leu Met Gly Thr Ser
 645 650 655
 Thr Val Glu Gln Leu Leu Glu Asn Val Cys Leu Leu Leu Ala Ser Arg
 660 665 670
 Thr Arg Asp Val Val Lys Ser Ala Leu Gly Phe Ile Lys Val Ala Val
 675 680 685
 Thr Val Met Asp Val Ala His Leu Ala Lys His Val Gln Leu Val Met
 690 695 700
 Glu Ala Ile Gly Lys Leu Ser Asp Asp Met Arg Arg His Phe Arg Met
 705 710 715 720
 Lys Leu Arg Asn Leu Phe Thr Lys Phe Ile Arg Lys Phe Gly Phe Glu
 725 730 735
 Leu Val Lys Arg Leu Leu Pro Glu Glu Tyr His Arg Val Leu Val Asn
 740 745 750
 Ile Arg Lys Ala Glu Ala Arg Ala Lys Arg His Arg Ala Leu Ser Gln
 755 760 765
 Ala Ala Val Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Pro Ala
 770 775 780
 Gln Gly Lys Gly Asp Ser Ile Glu Glu Ile Leu Ala Asp Ser Glu Asp
 785 790 795 800
 Glu Glu Asp Asn Glu Glu Glu Glu Arg Ser Arg Gly Lys Glu Gln Arg
 805 810 815
 Lys Leu Ala Arg Gln Arg Ser Arg Ala Trp Leu Lys Glu Gly Gly Gly
 820 825 830
 Asp Glu Pro Leu Asn Phe Leu Asp Pro Lys Val Ala Gln Arg Val Leu
 835 840 845
 Ala Thr Gln Pro Gly Pro Gly Arg Gly Arg Lys Lys Asp His Gly Phe
 850 855 860
 Lys Val Ser Ala Asp Gly Arg Leu Ile Ile Arg Glu Glu Ala Asp Gly
 865 870 875 880
 Asn Lys Met Glu Glu Glu Glu Gly Ala Lys Gly Glu Asp Glu Glu Met
 885 890 895

Ala Asp Pro Met Glu Asp Val Ile Ile Arg Asn Lys Lys His Gln Lys
 900 905 910
 Leu Lys His Gln Lys Glu Ala Glu Glu Glu Glu Leu Glu Ile Pro Pro
 915 920 925
 Gln Tyr Gln Ala Gly Gly Ser Gly Ile His Arg Pro Val Ala Lys Lys
 930 935 940
 Ala Met Pro Gly Ala Glu Tyr Lys Ala Lys Lys Ala Lys Gly Asp Val
 945 950 955 960
 Lys Lys Lys Gly Arg Pro Asp Pro Tyr Ala Tyr Ile Pro Leu Asn Arg
 965 970 975
 Ser Lys Leu Asn Arg Arg Lys Lys Met Lys Leu Gln Gly Gln Phe Lys
 980 985 990
 Gly Leu Val Lys Ala Ala Gln Arg Gly Ser Gln Val Gly His Lys Asn
 995 1000 1005
 Arg Arg Lys Asp Arg Arg Pro
 1010 1015

<210> 4793

<211> 445

<212> PRT

<213> Homo sapiens

<400> 4793

Met Lys Asn Pro Glu Ala Gln Gln Asp Val Ser Val Ser Gln Gly Phe
 1 5 10 15
 Arg Met Leu Phe Tyr Thr Met Lys Pro Ser Glu Thr Ser Phe Gln Thr
 20 25 30
 Leu Glu Glu Val Pro Asp Tyr Val Lys Lys Ala Thr Pro Phe Phe Ile
 35 40 45
 Ser Leu Met Leu Leu Glu Leu Val Val Ser Trp Ile Leu Lys Gly Lys
 50 55 60
 Pro Pro Gly Arg Leu Asp Asp Ala Leu Thr Ser Ile Ser Ala Gly Val
 65 70 75 80
 Leu Ser Arg Leu Pro Ser Leu Phe Phe Arg Ser Ile Glu Leu Thr Ser
 85 90 95

Tyr Ile Tyr Ile Trp Glu Asn Tyr Arg Leu Phe Asn Leu Pro Trp Asp
 100 105 110
 Ser Pro Trp Thr Trp Tyr Ser Ala Phe Leu Gly Val Asp Phe Gly Tyr
 115 120 125
 Tyr Trp Phe His Arg Met Ala His Glu Val Asn Ile Met Trp Ala Gly
 130 135 140
 His Gln Thr His His Ser Ser Glu Asp Tyr Asn Leu Ser Thr Ala Leu
 145 150 155 160
 Arg Gln Ser Val Leu Gln Ile Tyr Thr Ser Trp Ile Phe Tyr Ser Pro
 165 170 175
 Leu Ala Leu Phe Ile Pro Pro Ser Val Tyr Ala Val His Leu Gln Phe
 180 185 190
 Asn Leu Leu Tyr Gln Phe Trp Ile His Thr Glu Val Ile Asn Asn Leu
 195 200 205
 Gly Pro Leu Glu Leu Ile Leu Asn Thr Pro Ser His His Arg Val His
 210 215 220
 His Gly Arg Asn Arg Tyr Cys Ile Asp Lys Asn Tyr Ala Gly Val Leu
 225 230 235 240
 Ile Ile Trp Asp Lys Ile Phe Gly Thr Phe Glu Ala Glu Asn Glu Lys
 245 250 255
 Val Val Tyr Gly Leu Thr His Pro Ile Asn Thr Phe Glu Pro Ile Lys
 260 265 270
 Val Gln Phe His His Leu Phe Ser Ile Trp Thr Thr Phe Trp Ala Thr
 275 280 285
 Pro Gly Phe Phe Asn Lys Phe Ser Val Ile Phe Lys Gly Pro Gly Trp
 290 295 300
 Gly Pro Gly Lys Pro Arg Leu Gly Leu Ser Glu Glu Ile Pro Glu Val
 305 310 315 320
 Thr Gly Lys Glu Val Pro Phe Ser Ser Ser Ser Ser Gln Leu Leu Lys
 325 330 335
 Ile Tyr Thr Val Val Gln Phe Ala Leu Met Leu Ala Phe Tyr Glu Glu
 340 345 350
 Thr Phe Ala Asp Thr Ala Ala Leu Ser Gln Val Thr Leu Leu Leu Arg
 355 360 365
 Val Cys Phe Ile Ile Leu Thr Leu Thr Ser Ile Gly Phe Leu Leu Asp
 370 375 380

Gln Arg Pro Lys Ala Ala Ile Met Glu Thr Leu Arg Cys Leu Met Phe
 385 390 395 400
 Leu Met Leu Tyr Arg Phe Gly His Leu Lys Pro Leu Val Pro Ser Leu
 405 410 415
 Ser Ser Ala Phe Glu Ile Val Phe Ser Ile Cys Ile Ala Phe Trp Gly
 420 425 430
 Val Arg Ser Met Lys Gln Leu Thr Ser His Pro Trp Lys
 435 440 445

<210> 4794

<211> 735

<212> PRT

<213> Homo sapiens

<400> 4794

Met Thr Cys Leu Ile Cys Ile Ala Ser Val Lys Arg Asn Gln Ala Val
 1 5 10 15
 Trp Ser Cys Ser Gly Cys Phe Cys Ile Phe His Met Pro Cys Ile Gln
 20 25 30
 Lys Trp Ala Lys Asp Ser Gln Phe Leu Val Ser Ser Val Thr Asp Asp
 35 40 45
 Asp Phe Gly Lys Lys Asp Cys Pro Trp Pro Cys Pro Lys Cys Arg Phe
 50 55 60
 Glu Tyr Lys Arg Ser Glu Thr Pro Ser Arg Tyr Tyr Cys Tyr Cys Gly
 65 70 75 80
 Lys Val Glu Asp Pro Pro Leu Asp Pro Trp Leu Val Pro His Ser Cys
 85 90 95
 Gly Gln Val Cys Glu Arg Glu Phe Lys Pro Pro Cys Gly His Lys Cys
 100 105 110
 Leu Leu Leu Cys His Pro Gly Pro Cys Pro Pro Cys Pro Lys Met Val
 115 120 125
 Thr Thr Thr Cys Tyr Cys Lys Lys Ala Lys Pro Ile Pro Arg Arg Cys
 130 135 140
 Ser Ala Lys Glu Trp Ser Cys Gln Leu Pro Cys Gly Gln Lys Leu Leu
 145 150 155 160

Cys Gly Gln His Lys Cys Glu Asn Pro Cys His Ala Gly Ser Cys Gln			
165	170	175	
Pro Cys Pro Arg Val Ser Arg Gln Lys Cys Val Cys Gly Lys Lys Val			
180	185	190	
Ala Glu Arg Ser Cys Ala Ser Pro Leu Trp His Cys Asp Gln Val Cys			
195	200	205	
Gly Lys Thr Leu Pro Cys Gly Asn His Thr Cys Glu Gln Val Cys His			
210	215	220	
Val Gly Ala Cys Gly Glu Cys Pro Arg Ser Gly Lys Arg Phe Cys Pro			
225	230	235	240
Cys Gln Lys Ser Lys Phe Ser Leu Pro Cys Thr Glu Asp Val Pro Thr			
245	250	255	
Cys Gly Asp Ser Cys Asp Lys Val Leu Glu Cys Gly Ile His Arg Cys			
260	265	270	
Ser Gln Arg Cys His Arg Gly Pro Cys Glu Thr Cys Arg Gln Glu Val			
275	280	285	
Glu Lys His Cys Arg Cys Gly Lys His Thr Lys Arg Met Pro Cys His			
290	295	300	
Lys Pro Tyr Leu Cys Glu Thr Lys Cys Val Lys Met Arg Asp Cys Gln			
305	310	315	320
Lys His Gln Cys Arg Arg Lys Cys Cys Pro Gly Asn Cys Pro Pro Cys			
325	330	335	
Asp Gln Asn Cys Gly Arg Thr Leu Gly Cys Arg Asn His Lys Cys Pro			
340	345	350	
Ser Val Cys His Arg Gly Ser Cys Tyr Pro Cys Pro Glu Thr Val Asp			
355	360	365	
Val Lys Cys Asn Cys Gly Asn Thr Lys Val Thr Val Pro Cys Gly Arg			
370	375	380	
Glu Arg Thr Thr Arg Pro Pro Lys Cys Lys Glu Gln Cys Ser Arg Pro			
385	390	395	400
Pro Thr Cys His His Thr Ser Gln Glu Lys His Arg Cys His Phe Gly			
405	410	415	
Ser Cys Pro Pro Cys His Gln Pro Cys Gln Lys Val Leu Glu Lys Cys			
420	425	430	
Gly His Leu Cys Pro Ala Pro Cys His Asp Gln Ala Leu Ile Lys Gln			
435	440	445	

Thr Gly Arg His Gln Pro Thr Gly Pro Trp Glu Gln Pro Ser Glu Pro
 450 455 460
 Ala Phe Ile Gln Thr Ala Leu Pro Cys Pro Pro Cys Gln Val Pro Ile
 465 470 475 480
 Pro Met Glu Cys Leu Gly Lys His Glu Val Ser Pro Leu Pro Cys His
 485 490 495
 Ala Val Gly Pro Tyr Ser Cys Lys Arg Val Cys Gly Arg Ile Leu Asp
 500 505 510
 Cys Gln Asn His Thr Cys Met Lys Glu Cys His Lys Val Thr Lys Thr
 515 520 525
 Asp Gly Cys Thr Gly Lys Asn Lys Ala Gly Pro Glu Cys Leu His Cys
 530 535 540
 Glu Glu Gly Cys Ser Lys Ser Arg Pro Leu Gly Cys Leu His Pro Cys
 545 550 555 560
 Ile Leu Arg Cys His Pro Gly Glu Cys Pro Pro Cys Val Gln Met Leu
 565 570 575
 Arg Ile Lys Cys His Cys Lys Ile Thr Ser Leu Tyr Val Glu Cys Arg
 580 585 590
 Lys Ile Thr Thr Ala Asp Val Asn Glu Lys Asn Leu Leu Ser Cys Cys
 595 600 605
 Lys Asn Gln Cys Pro Lys Glu Leu Pro Cys Gly His Arg Cys Lys Glu
 610 615 620
 Met Cys His Pro Gly Glu Cys Pro Phe Asn Cys Asn Gln Lys Val Lys
 625 630 635 640
 Leu Arg Cys Pro Cys Lys Arg Ile Lys Lys Glu Leu Gln Cys Asn Lys
 645 650 655
 Val Arg Glu Asn Gln Val Ser Ile Glu Cys Asp Thr Thr Cys Lys Glu
 660 665 670
 Met Lys Arg Lys Ala Ser Glu Ile Lys Glu Ala Glu Ala Lys Ala Ala
 675 680 685
 Leu Glu Glu Glu Lys Arg Arg Gln Gln Ala Glu Leu Glu Ala Phe Glu
 690 695 700
 Asn Arg Leu Lys Gly Arg Arg Lys Lys Asn Arg Lys Arg Asp Glu Val
 705 710 715 720
 Ala Val Glu Leu Ser Leu Trp Gln Lys His Lys Tyr Tyr Leu Ile
 725 730 735

<210> 4795

<211> 578

<212> PRT

<213> Homo sapiens

<400> 4795

```

Met Pro Gly Pro His Leu Ser Leu Ser Ala Ile Ser Met Ser Leu Ser
 1             5             10             15
Leu His Leu Phe Leu Leu Pro Leu Ser Leu Tyr Phe Phe Ser Ser Leu
      20             25             30
Leu His Phe Gln Ser Leu Leu Leu Cys Leu Leu Val Ser Arg Phe Cys
      35             40             45
Val Ser Ile Ser Leu Thr Cys Ile Ser Met Ser Ser Phe Val Leu Phe
      50             55             60
Ser Met Ser Leu Gly Arg His His Leu Leu Pro Thr Lys Ser Pro Tyr
      65             70             75             80
Pro His Ala Tyr Thr Ser Leu Leu Ser Leu Pro Gln Phe Asn Pro Glu
      85             90             95
Leu Val Leu Val Ser Ala Gly Phe Asp Ala Ala Arg Gly Asp Pro Leu
      100            105            110
Gly Gly Cys Gln Val Ser Pro Glu Gly Tyr Ala His Leu Thr His Leu
      115            120            125
Leu Met Gly Leu Ala Ser Gly Arg Ile Ile Leu Ile Leu Glu Gly Gly
      130            135            140
Tyr Asn Leu Thr Ser Ile Ser Glu Ser Met Ala Ala Cys Thr Arg Ser
      145            150            155            160
Leu Leu Gly Asp Pro Pro Pro Leu Leu Thr Leu Pro Arg Pro Pro Leu
      165            170            175
Ser Gly Ala Leu Ala Ser Ile Thr Glu Thr Ile Gln Val His Arg Arg
      180            185            190
Tyr Trp Arg Ser Leu Arg Val Met Lys Val Glu Asp Arg Glu Gly Pro
      195            200            205
Ser Ser Ser Lys Leu Val Thr Lys Lys Ala Pro Gln Pro Ala Lys Pro
      210            215            220

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Arg Leu Ala Glu Arg Met Thr Thr Arg Glu Lys Lys Val Leu Glu Ala
 225 230 235 240
 Gly Met Gly Lys Val Thr Ser Ala Ser Phe Gly Glu Glu Ser Thr Pro
 245 250 255
 Gly Gln Thr Asn Ser Glu Thr Ala Val Val Ala Leu Thr Gln Asp Gln
 260 265 270
 Pro Ser Glu Ala Ala Thr Gly Gly Ala Thr Leu Ala Gln Thr Ile Ser
 275 280 285
 Glu Ala Ala Ile Gly Gly Ala Met Leu Gly Gln Thr Thr Ser Glu Glu
 290 295 300
 Ala Val Gly Gly Ala Thr Pro Asp Gln Thr Thr Ser Glu Glu Thr Val
 305 310 315 320
 Gly Gly Ala Ile Leu Asp Gln Thr Thr Ser Glu Asp Ala Val Gly Gly
 325 330 335
 Ala Thr Leu Gly Gln Thr Thr Ser Glu Glu Ala Val Gly Gly Ala Thr
 340 345 350
 Leu Ala Gln Thr Thr Ser Glu Ala Ala Met Glu Gly Ala Thr Leu Asp
 355 360 365
 Gln Thr Thr Ser Glu Glu Ala Pro Gly Gly Thr Glu Leu Ile Gln Thr
 370 375 380
 Pro Leu Ala Ser Ser Thr Asp His Gln Thr Pro Pro Thr Ser Pro Val
 385 390 395 400
 Gln Gly Thr Thr Pro Gln Ile Ser Pro Ser Thr Leu Ile Gly Ser Leu
 405 410 415
 Arg Thr Leu Glu Leu Gly Ser Glu Ser Gln Gly Ala Ser Glu Ser Gln
 420 425 430
 Ala Pro Gly Glu Glu Asn Leu Leu Gly Glu Ala Ala Gly Gly Gln Asp
 435 440 445
 Met Ala Asp Ser Met Leu Met Gln Gly Ser Arg Gly Leu Thr Asp Gln
 450 455 460
 Ala Ile Phe Tyr Ala Val Thr Pro Leu Pro Trp Cys Pro His Leu Val
 465 470 475 480
 Ala Val Cys Pro Ile Pro Ala Ala Gly Leu Asp Val Thr Gln Pro Cys
 485 490 495
 Gly Asp Cys Gly Thr Ile Gln Glu Asn Trp Val Cys Leu Ser Cys Tyr
 500 505 510

Gln Val Tyr Cys Gly Arg Tyr Ile Asn Gly His Met Leu Gln His His
 515 520 525
 Gly Asn Ser Gly His Pro Leu Val Leu Ser Tyr Ile Asp Leu Ser Ala

 530 535 540
 Trp Cys Tyr Tyr Cys Gln Ala Tyr Val His His Gln Ala Leu Leu Asp
 545 550 555 560
 Val Lys Asn Ile Ala His Gln Asn Lys Phe Gly Glu Asp Met Pro His
 565 570 575
 Pro His

<210> 4796

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4796

Met Gly Thr Asp Glu Asp Cys Tyr Gln Glu Arg Gly Asp Trp Asp Gln
 1 5 10 15
 Glu Ser Gly Phe Gly Arg Glu Glu Pro Arg Leu Leu Phe Trp Met Cys
 20 25 30
 Gln Asp Arg Ser Ala Phe Glu Lys Ser Glu Leu Trp Tyr Gln Ile Ala
 35 40 45
 Ser Trp Ile Cys Glu Thr Gly Val Trp Gly Lys Glu Arg Pro Trp Leu
 50 55 60
 Lys Asn Val Ser Phe Gly Asn Val Asn Ile Lys Pro Gln Asp Trp Val
 65 70 75 80
 Thr Trp Pro Ser Arg Gly Val Gly Thr Glu Lys Arg Pro Trp Pro Glu
 85 90 95
 Pro Trp Gly His Leu His Leu Gly Glu Lys Gly Met
 100 105

<210> 4797

<211> 142

<212> PRT

<213> Homo sapiens

<400> 4797

```

Met Ala Pro Val Lys Ile Ser His Val Val Ser Phe Ser Ser Gln Asp
 1              5              10             15
Pro Lys Tyr Pro Val Glu Asn Leu Leu Asn Pro Asp Ser Pro Arg Arg
      20              25             30
Pro Trp Leu Gly Cys Pro Gln Asp Lys Ser Gly Gln Leu Lys Val Glu
      35              40             45
Leu Gln Leu Glu Arg Ala Val Pro Thr Gly Tyr Ile Asp Val Gly Asn
      50              55             60
Cys Gly Cys Ala Phe Leu Gln Ile Asp Val Gly His Ser Ser Trp Pro
      65              70             75             80
Leu Asp Arg Pro Phe Ile Thr Leu Leu Pro Ala Thr Thr Leu Met Ser
      85              90             95
Leu Thr Asp Ser Lys Gln Gly Lys Asn Arg Ser Gly Val Arg Met Phe
      100             105            110
Lys Asp Gly Lys Glu Gly Lys Ser Arg Lys Asp Gly Gly Gly Leu Tyr
      115             120            125
Glu Lys Gln Arg Cys Ser Thr Lys Glu Asp Cys Glu Cys Tyr
      130             135            140

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<210> 4798

<211> 153

<212> PRT

<213> Homo sapiens

<400> 4798

```

Met Tyr Glu Ile Tyr Val Glu Thr Cys Gly Gln Asn Thr Glu Asn Gln
 1              5              10             15
Val Asn Pro Ala Thr Phe Gly Lys Leu Val Arg Leu Val Phe Pro Asp
      20              25             30
Leu Gly Thr Arg Trp Leu Gly Thr Arg Gly Ser Ala Arg Tyr His Tyr

```

35	40	45
Asp Gly Ile Cys Ile Lys Lys Ser Ser Phe Phe Tyr Ala Gln Tyr Cys		
50	55	60
Cys Leu Ile Gly Glu Lys Arg Tyr His Ser Gly Asp Ala Ile Ala Phe		
65	70	75
Glu Lys Ser Thr Asn Tyr Asn Ser Ile Ile Gln Gln Glu Ala Thr Cys		
85	90	95
Glu Asp His Ser Pro Met Lys Thr Asp Pro Val Gly Ser Pro Leu Ser		
100	105	110
Glu Phe Arg Arg Cys Pro Phe Leu Glu Gln Glu Leu Ala Lys Lys Tyr		
115	120	125
Ser Cys Asn Met Met Ala Phe Leu Ala Asp Glu Tyr Cys Asn Tyr Cys		
130	135	140
Arg Asp Ile Leu Arg Asn Val Arg Asn		
145	150	

<210> 4799

<211> 787

<212> PRT

<213> Homo sapiens

<400> 4799

Met Glu Gly Ala Gly Glu Asn Ala Pro Glu Ser Ser Ser Ser Ala Pro		
1	5	10
Gly Ser Glu Glu Ser Ala Arg Asp Pro Gln Val Pro Pro Pro Glu Glu		
20	25	30
Glu Ser Gly Asp Cys Ala Arg Ser Leu Glu Ala Val Pro Lys Lys Leu		
35	40	45
Cys Gly Tyr Leu Ser Lys Phe Gly Gly Lys Gly Pro Ile Arg Gly Trp		
50	55	60
Lys Ser Arg Trp Phe Phe Tyr Asp Glu Arg Lys Cys Gln Leu Tyr Tyr		
65	70	75
Ser Arg Thr Ala Gln Asp Ala Asn Pro Leu Asp Ser Val Asp Leu Ser		
85	90	95
Ser Ala Val Phe Asp Cys Lys Ala Asp Ala Glu Glu Gly Ile Phe Glu		

100	105	110
Ile Lys Thr Pro Ser Arg Val	Ile Thr Leu Lys Ala	Ala Thr Lys Gln
115	120	125
Ala Met Leu Tyr Trp Leu Gln	Gln Leu Gln Met Lys Arg	Trp Glu Phe
130	135	140
His Asn Ser Pro Pro Ala Pro	Pro Ala Thr Pro Asp Ala	Ala Leu Ala
145	150	155
Gly Asn Gly Pro Val Leu His	Leu Glu Leu Gly Gln Glu	Glu Ala Glu
165	170	175
Leu Glu Glu Phe Leu Cys Pro	Val Lys Thr Pro Pro Gly	Leu Val Gly
180	185	190
Val Ala Ala Ala Leu Gln Pro	Phe Pro Ala Leu Gln Asn	Ile Ser Leu
195	200	205
Lys His Leu Gly Thr Glu Ile	Gln Asn Thr Met His Asn	Ile Arg Gly
210	215	220
Asn Lys Gln Ala Gln Gly Thr	Gly His Glu Pro Pro Gly	Glu Asp Ser
225	230	235
Pro Gln Ser Gly Glu Pro Gln	Arg Glu Glu Gln Pro Leu	Ala Ser Asp
245	250	255
Ala Ser Thr Pro Gly Arg Glu	Pro Glu Asp Ser Pro Lys	Pro Ala Pro
260	265	270
Lys Pro Ser Leu Thr Ile Ser	Phe Ala Gln Lys Ala Lys	Arg Gln Asn
275	280	285
Asn Thr Phe Pro Phe Phe Ser	Glu Gly Ile Thr Arg Asn	Arg Thr Ala
290	295	300
Gln Glu Lys Val Ala Ala Leu	Glu Gln Gln Val Leu Met	Leu Thr Lys
305	310	315
Glu Leu Lys Ser Gln Lys Glu	Leu Val Lys Ile Leu His	Lys Ala Leu
325	330	335
Glu Ala Ala Gln Gln Glu Lys	Arg Ala Ser Ser Ala Tyr	Leu Ala Ala
340	345	350
Ala Glu Asp Lys Asp Arg Leu	Glu Leu Val Arg His Lys	Val Arg Gln
355	360	365
Ile Ala Glu Leu Gly Arg Arg	Val Glu Ala Leu Glu Gln	Glu Arg Glu
370	375	380
Ser Leu Ala His Thr Ala Ser	Leu Arg Glu Gln Gln Val	Gln Glu Leu

385		390		395		400
Gln Gln His Val	Gln Leu Leu Met Asp Lys Asn His Ala	Lys Gln Gln				
	405		410		415	
Val Ile Cys Lys	Leu Ser Glu Lys Val Thr Gln Asp Phe Thr His Pro					
	420		425		430	
Pro Asp Gln Ser Pro	Leu Arg Pro Asp Ala Ala Asn Arg Asp Phe Leu					
	435		440		445	
Ser Gln Gln Gly Lys	Ile Glu His Leu Lys Asp Asp Met Glu Ala Tyr					
	450		455		460	
Arg Thr Gln Asn Cys	Phe Leu Asn Ser Glu Ile His Gln Val Thr Lys					
465		470		475		480
Ile Trp Arg Lys Val	Ala Glu Lys Glu Lys Ala Leu Leu Thr Lys Cys					
	485		490		495	
Ala Tyr Leu Gln Ala	Arg Asn Cys Gln Val Glu Ser Lys Tyr Leu Ala					
	500		505		510	
Gly Leu Arg Arg Leu	Gln Glu Ala Leu Gly Asp Glu Ala Ser Glu Cys					
	515		520		525	
Ser Glu Leu Leu Arg	Gln Leu Val Gln Glu Ala Leu Gln Trp Glu Ala					
	530		535		540	
Gly Glu Ala Ser Ser	Asp Ser Ile Glu Leu Ser Pro Ile Ser Lys Tyr					
545		550		555		560
Asp Glu Tyr Gly Phe	Leu Thr Val Pro Asp Tyr Glu Val Glu Asp Leu					
	565		570		575	
Lys Leu Leu Ala Lys	Ile Gln Ala Leu Glu Ser Arg Ser His His Leu					
	580		585		590	
Leu Gly Leu Glu Ala	Val Asp Arg Pro Leu Arg Glu Arg Trp Val Ala					
	595		600		605	
Leu Gly Asp Leu Val	Pro Ser Ala Glu Leu Lys Gln Leu Leu Arg Ala					
	610		615		620	
Gly Val Pro Arg Glu	His Arg Pro Arg Val Trp Arg Trp Leu Val His					
625		630		635		640
Leu Arg Val Gln His	Leu His Thr Pro Gly Cys Tyr Gln Glu Leu Leu					
	645		650		655	
Ser Arg Gly Gln Ala	Arg Glu His Pro Ala Ala Arg Gln Ile Glu Leu					
	660		665		670	
Asp Leu Asn Arg Thr	Phe Pro Asn Asn Lys His Phe Thr Cys Gly Ser					

675	680	685
Trp Ser Ser Leu Arg Gln Ser Thr Trp Gly Gly Gly His Pro Gly Ala		
690	695	700
Glu Leu Cys Pro Arg Ala Val Pro Ala Arg Thr Arg Trp Arg Gly Lys		
705	710	715
Pro Asp Leu Ala Thr Ser Pro Pro His Ser Leu Pro His Pro Trp Leu		
	725	730
Ala Asp Pro Leu Glu Val Arg His Gly Pro Val Ala Gln Pro Trp Val		735
	740	745
Ser His His His Val Thr Leu Asp Met Ser Leu Pro Leu Ser Gly Pro		750
	755	760
Gln Phe Pro His Trp Asp Ile Val Cys Cys Lys Ala Ile Gly Trp Ala		765
	770	775
Thr Ser Ser		780
785		

<210> 4800

<211> 221

<212> PRT

<213> Homo sapiens

<400> 4800

Met Ser Gly Glu Ala Thr Val Leu Ala Tyr His Ala Pro Glu Glu Gln		
1	5	10
Glu Gly Leu Leu Val Val Lys Val Glu Glu Glu Asn Tyr Val Leu Asp		
	20	25
Gln Asp Phe Gly Leu Gln Glu Asn Pro Trp Ser Gln Glu Val Phe Arg		30
	35	40
Gln Lys Phe Arg Gln Phe Ser Tyr Ser Asp Ser Thr Gly Pro Arg Glu		45
	50	55
Ala Leu Ser Arg Leu Arg Glu Leu Cys Cys Gln Trp Leu Arg Pro Glu		60
	65	70
Val His Ser Lys Glu Gln Ile Leu Glu Leu Leu Met Leu Glu Gln Phe		75
	80	85
Leu Ala Ile Leu Pro Glu Glu Leu Gln Ala Trp Leu Arg Glu His Arg		90
		95

100	105	110	
Pro Glu Asn Gly Glu Glu Ala Val Thr Met Leu Glu Glu Leu Glu Lys			
115	120	125	
Glu Leu Glu Glu Pro Arg Gln Asp Thr Thr His Gly Gln Glu Met			
130	135	140	
Phe Trp Gln Glu Met Thr Ser Thr Gly Ala Leu Lys Ser Leu Ser Leu			
145	150	155	160
Asn Ser Pro Val Gln Pro Leu Glu Asn Gln Cys Lys Thr Glu Thr Gln			
165	170	175	
Glu Ser Gln Ala Phe Gln Glu Arg Asp Gly Val Ser Leu Cys His Pro			
180	185	190	
Gly Trp Ser Ala Val Val Gln Pro Gln Leu Thr Ala Val Ala Leu Asn			
195	200	205	
Pro Trp Val Lys Val Ile Leu Leu Pro Gln Pro Pro Glu			
210	215	220	

<210> 4801

<211> 1043

<212> PRT

<213> Homo sapiens

<400> 4801

Met Ala Met Ala Leu Glu Leu Gln Ala Gln Ala Ser Pro Gln Pro Glu			
1	5	10	15
Pro Glu Glu Leu Leu Ile Val Lys Leu Glu Glu Asp Ser Trp Gly Ser			
20	25	30	
Glu Ser Lys Leu Trp Glu Lys Asp Arg Gly Ser Val Ser Gly Pro Glu			
35	40	45	
Ala Ser Arg Gln Arg Phe Arg Gln Phe Gln Tyr Arg Asp Ala Ala Gly			
50	55	60	
Pro His Glu Ala Phe Ser Gln Leu Trp Ala Leu Cys Cys Arg Trp Leu			
65	70	75	80
Arg Pro Glu Ile Arg Leu Lys Glu Gln Ile Leu Glu Leu Leu Val Leu			
85	90	95	
Glu Gln Phe Leu Thr Ile Leu Pro Arg Glu Val Gln Thr Trp Val Gln			

100	105	110
Ala Arg His Pro Glu Ser Gly Glu Glu Ala Val Ala Leu Val Glu Asp		
115	120	125
Trp His Arg Glu Thr Arg Thr Ala Gly Gln Ser Gly Leu Glu Leu His		
130	135	140
Thr Glu Glu Thr Arg Pro Leu Lys Thr Gly Glu Glu Ala Gln Ser Phe		
145	150	155
Gln Leu Gln Pro Val Asp Pro Trp Pro Glu Gly Gln Ser Gln Lys Lys		
165	170	175
Gly Val Lys Asn Thr Cys Pro Asp Leu Pro Asn His Leu Asn Ala Glu		
180	185	190
Val Ala Pro Gln Pro Leu Lys Glu Ser Ala Val Leu Thr Pro Arg Val		
195	200	205
Pro Thr Leu Pro Lys Met Gly Ser Val Gly Asp Trp Glu Val Thr Ala		
210	215	220
Glu Ser Gln Glu Ala Leu Gly Pro Gly Lys His Ala Glu Lys Glu Leu		
225	230	235
Cys Lys Asp Pro Pro Gly Asp Asp Cys Gly Asn Ser Val Cys Leu Gly		
245	250	255
Val Pro Val Ser Lys Pro Ser Asn Thr Ser Glu Lys Glu Gln Gly Pro		
260	265	270
Glu Phe Trp Gly Leu Ser Leu Ile Asn Ser Gly Lys Arg Ser Thr Ala		
275	280	285
Asp Tyr Ser Leu Asp Asn Glu Pro Ala Gln Ala Leu Thr Trp Arg Asp		
290	295	300
Ser Arg Ala Trp Glu Glu Gln Tyr Gln Trp Asp Val Glu Asp Met Lys		
305	310	315
Val Ser Gly Val His Trp Gly Tyr Glu Glu Thr Lys Thr Phe Leu Ala		
325	330	335
Ile Leu Ser Glu Ser Pro Phe Ser Glu Lys Leu Arg Thr Cys His Gln		
340	345	350
Asn Arg Gln Val Tyr Arg Ala Ile Ala Glu Gln Leu Arg Ala Arg Gly		
355	360	365
Phe Leu Arg Thr Leu Glu Gln Cys Arg Tyr Arg Val Lys Asn Leu Leu		
370	375	380

Arg Asn Tyr Arg Lys Ala Lys Ser Ser His Pro Pro Gly Thr Cys Pro
 385 390 395 400
 Phe Tyr Glu Glu Leu Glu Ala Leu Val Arg Ala Arg Thr Ala Ile Arg
 405 410 415
 Ala Thr Asp Gly Pro Gly Glu Ala Val Ala Leu Pro Arg Leu Gly Asp
 420 425 430
 Ser Asp Ala Glu Met Asp Glu Gln Glu Glu Gly Gly Trp Asp Pro Glu
 435 440 445
 Glu Met Ala Glu Asp Cys Asn Gly Ala Gly Leu Val Asn Val Glu Ser
 450 455 460
 Thr Gln Gly Pro Arg Ile Ala Gly Ala Pro Ala Leu Phe Gln Ser Arg
 465 470 475 480
 Ile Ala Gly Val His Trp Gly Tyr Glu Glu Thr Lys Ala Phe Leu Ala
 485 490 495
 Ile Leu Ser Glu Ser Pro Phe Ser Glu Lys Leu Arg Thr Cys His Gln
 500 505 510
 Asn Ser Gln Val Tyr Arg Ala Ile Ala Glu Arg Leu Cys Ala Leu Gly
 515 520 525
 Phe Leu Arg Thr Leu Glu Gln Cys Arg Tyr Arg Phe Lys Asn Leu Leu
 530 535 540
 Arg Ser Tyr Arg Lys Ala Lys Ser Ser His Pro Pro Gly Thr Cys Pro
 545 550 555 560
 Phe Tyr Glu Glu Leu Asp Ser Leu Met Arg Ala Arg Ala Ala Val Arg
 565 570 575
 Ala Met Gly Thr Val Arg Glu Ala Ala Gly Leu Pro Arg Cys Gly Gln
 580 585 590
 Ser Ser Ala Glu Thr Asp Ala Gln Glu Ala Trp Gly Glu Val Ala Asn
 595 600 605
 Glu Asp Ala Val Lys Pro Ser Thr Leu Cys Pro Lys Ala Pro Asp Met
 610 615 620
 Gly Phe Glu Met Arg His Glu Asp Glu Asp Gln Ile Ser Glu Gln Asp
 625 630 635 640
 Ile Phe Glu Gly Leu Pro Gly Ala Leu Ser Lys Cys Pro Thr Glu Ala
 645 650 655
 Val Cys Gln Pro Leu Asp Trp Gly Glu Asp Ser Glu Asn Glu Asn Glu
 660 665 670

Asp Glu Gly Gln Trp Gly Asn Pro Ser Gln Glu Gln Trp Gln Glu Ser			
675	680	685	
Ser Ser Glu Glu Asp Leu Glu Lys Leu Ile Asp His Gln Gly Leu Tyr			
690	695	700	
Leu Ala Glu Lys Pro Tyr Lys Cys Asp Thr Cys Met Lys Ser Phe Ser			
705	710	715	720
Arg Ser Ser His Phe Ile Ala His Gln Arg Ile His Thr Gly Glu Lys			
725	730	735	
Pro Tyr Lys Arg Leu Glu Cys Gly Lys Asn Phe Ser Asp Arg Ser Asn			
740	745	750	
Leu Asn Thr His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys			
755	760	765	
Leu Glu Cys Gly Lys Ser Phe Ser Asp His Ser Asn Leu Ile Thr His			
770	775	780	
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Gly Glu Cys Trp			
785	790	795	800
Lys Ser Phe Asn Gln Ser Ser Asn Leu Leu Lys His Gln Arg Ile His			
805	810	815	
Leu Gly Gly Asn Pro Asp Gln Cys Ser Glu Pro Gly Gly Asn Phe Ala			
820	825	830	
Gln Ser Pro Ser Phe Ser Ala His Trp Arg Asn Ser Thr Glu Glu Thr			
835	840	845	
Ala Pro Glu Gln Pro Gln Ser Ile Ser Lys Asp Leu Asn Ser Pro Gly			
850	855	860	
Pro His Ser Thr Asn Ser Gly Glu Lys Leu Tyr Glu Cys Ser Glu Cys			
865	870	875	880
Gly Arg Ser Phe Ser Lys Ser Ser Ala Leu Ile Ser His Gln Arg Ile			
885	890	895	
His Thr Gly Glu Lys Pro Tyr Glu Cys Ala Glu Cys Gly Lys Ser Phe			
900	905	910	
Ser Lys Ser Ser Thr Leu Ala Asn His Gln Arg Thr His Thr Gly Glu			
915	920	925	
Lys Pro Tyr Lys Cys Val Asp Cys Gly Lys Cys Phe Ser Glu Arg Ser			
930	935	940	
Lys Leu Ile Thr His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys			
945	950	955	960

Cys Leu Glu Cys Gly Lys Phe Phe Arg Asp Arg Ser Asn Leu Ile Thr
 965 970 975
 His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Arg Glu Cys
 980 985 990
 Gly Lys Cys Phe Asn Gln Ser Ser Ser Leu Ile Ile His Gln Arg Ile
 995 1000 1005
 His Thr Gly Glu Lys Pro Tyr Lys Cys Thr Glu Cys Gly Lys Asp Phe
 1010 1015 1020
 Asn Asn Ser Ser His Phe Ser Ala His Arg Arg Thr His Ala Gly Gly
 1025 1030 1035 1040
 Lys Ala Ser

<210> 4802

<211> 422

<212> PRT

<213> Homo sapiens

<400> 4802

Met Pro Leu Trp Glu Ala Pro Ser Asp His Pro Ala Asn Pro Pro Ala
 1 5 10 15
 Thr Leu Gln Gly His Thr Ser Leu Pro Gly Cys Gln Glu Glu Pro Ala
 20 25 30
 Arg Asp Pro Gln Ser Gly Leu Pro Gln Ile Thr Ser Glu Ser Ser Ser
 35 40 45
 Phe Ser Glu Gly Ser Leu Pro Ser Trp Ser Ser Gly Pro Ala Gly Ala
 50 55 60
 Lys Leu Asn Ala Ser His Glu Gly Ile Gly Ser Ser Ser Asp Gly Asn
 65 70 75 80
 Gly Asp Ser Lys Ala Ala Thr Glu Arg Val Val Ser Ala Met Asp Thr
 85 90 95
 Val Arg Arg Lys His Pro Glu Ile Thr Phe Tyr Ile Leu Val Lys Ala
 100 105 110
 Ile Tyr Thr Leu Gly Tyr Ser Val Ser Leu Met Ser Leu Ala Thr Gly

115	120	125	
Ser Ile Ile Leu Cys Leu Phe Arg Lys Leu His Cys Thr Arg Asn Tyr			
130	135	140	
Ile His Leu Asn Leu Phe Leu Ser Phe Ile Leu Arg Ala Ile Ser Val			
145	150	155	160
Leu Val Lys Asp Asp Val Leu Tyr Ser Ser Ser Gly Thr Leu His Cys			
	165	170	175
Pro Asp Gln Pro Ser Ser Trp Val Gly Cys Lys Leu Ser Leu Val Phe			
	180	185	190
Leu Gln Tyr Cys Ile Met Ala Asn Phe Phe Trp Leu Leu Val Glu Gly			
	195	200	205
Leu Tyr Leu His Thr Leu Leu Val Ala Met Leu Pro Pro Arg Arg Cys			
	210	215	220
Phe Leu Ala Tyr Leu Leu Ile Gly Trp Gly Leu Pro Thr Val Cys Ile			
225	230	235	240
Gly Ala Trp Thr Ala Ala Arg Leu Tyr Leu Glu Asp Thr Gly Cys Trp			
	245	250	255
Asp Thr Asn Asp His Ser Val Pro Trp Trp Val Ile Arg Ile Pro Ile			
	260	265	270
Leu Ile Ser Ile Ile Val Asn Phe Val Leu Phe Ile Ser Ile Ile Arg			
	275	280	285
Ile Leu Leu Gln Lys Leu Thr Ser Pro Asp Val Gly Gly Asn Asp Gln			
	290	295	300
Ser Gln Tyr Lys Arg Leu Ala Lys Ser Thr Leu Leu Leu Ile Pro Leu			
305	310	315	320
Phe Gly Val His Tyr Met Val Phe Ala Val Phe Pro Ile Ser Ile Ser			
	325	330	335
Ser Lys Tyr Gln Ile Leu Phe Glu Leu Cys Leu Gly Ser Phe Gln Gly			
	340	345	350
Leu Val Val Ala Val Leu Tyr Cys Phe Leu Asn Ser Glu Val Gln Cys			
	355	360	365
Glu Leu Lys Arg Lys Trp Arg Ser Arg Cys Pro Thr Pro Ser Ala Ser			
	370	375	380
Arg Asp Tyr Arg Val Cys Gly Ser Ser Phe Ser Arg Asn Gly Ser Glu			
385	390	395	400
Gly Ala Leu Gln Phe His Arg Gly Ser Arg Ala Gln Ser Phe Leu Gln			

405 410 415
 Thr Glu Thr Ser Val Ile
 420

<210> 4803

<211> 310

<212> PRT

<213> Homo sapiens

<400> 4803

Met Pro Ser Ser Lys Pro Gly Ser Pro Ala Pro Gln Asp Pro Ser Pro
 1 5 10 15
 Ser Cys Arg Thr Cys Ser Asn Gln Val Gln Pro Gly His Leu Leu Leu
 20 25 30
 Pro Leu Thr Lys Ala Ser Leu Thr Gly Pro Ser Pro Pro Pro Ala Lys
 35 40 45
 Leu Gly Arg Ala Gln Gly Ala Pro Ser Pro Lys Gly Pro Leu Glu Ile
 50 55 60
 Gly Trp Ser Pro Asp Ala Gln Pro Leu Arg Leu Gly Glu Thr Phe Leu
 65 70 75 80
 Pro Lys Gly Val Ala Gln Leu Ser Arg Ala Ser Ser Ser Gly His Lys
 85 90 95
 Val Gly Phe Leu Gln Pro Trp Pro Pro His Pro Leu Leu Pro Gln Glu
 100 105 110
 Arg Val Pro Arg His Gln Arg Gln Cys Cys Pro Arg Ala Gly Pro Ala
 115 120 125
 Phe Gly Cys Leu Arg Gly Arg Pro Gly Gly Trp Pro Ala Thr Gly Ser
 130 135 140
 Gly Gly Arg Gln Gln Gly Arg Lys Met Gly His Pro Pro Val Ser Pro
 145 150 155 160
 Ser Ala Pro Ala Pro Ala Gly Thr Thr Ala Ile Pro Gly Leu Ile Pro
 165 170 175
 Asp Leu Val Ala Gly Thr Pro Trp Pro Arg Trp Ala Leu Ile Ala Gly
 180 185 190
 Ala Leu Ala Ala Gly Val Leu Leu Val Ser Cys Leu Leu Cys Ala Ala

195	200	205
Cys Cys Cys Cys Arg Arg His Arg Lys Lys Pro Arg Asp Lys Glu Ser		
210	215	220
Val Gly Leu Gly Ser Ala Arg Gly Thr Thr Thr Thr His Leu Val Gln		
225	230	235
Pro Asp Val Asp Gly Leu Glu Ser Ser Pro Gly Asp Ala Gln Gln Trp		
245	250	255
Gly Arg Leu Gln Leu Ser Leu Glu Phe Asp Phe Gly Ser Gln Glu Val		
260	265	270
Lys Gly Pro Ala Ala Gln Asp Gln Arg Phe Cys Glu Phe Pro Glu Arg		
275	280	285
Val Thr Gly Glu Gly Gln Thr Pro Cys Pro Gly Trp Trp Gly Ala Asp		
290	295	300
Arg Ala Gly Ala Leu Gly		
305	310	

<210> 4804

<211> 872

<212> PRT

<213> Homo sapiens

<400> 4804

Met Gln Glu Ala Ile Ile Leu Leu Ala Leu Leu Gly Ala Met Ser Gly
1 5 10 15
Asn Val Ala Glu Asn Ser Pro Pro Gly Thr Ser Val His Lys Phe Ser
20 25 30
Val Lys Leu Ser Ala Ser Leu Ser Pro Val Ile Pro Gly Phe Pro Gln
35 40 45
Ile Val Asn Ser Asn Pro Leu Thr Glu Ala Phe Arg Val Asn Trp Leu
50 55 60
Ser Gly Thr Tyr Phe Glu Val Val Thr Thr Gly Met Glu Gln Leu Asp
65 70 75 80
Phe Glu Thr Gly Pro Asn Ile Phe Asp Leu Gln Ile Tyr Val Lys Asp
85 90 95
Glu Val Gly Val Thr Asp Leu Gln Val Leu Thr Val Gln Val Thr Asp

100	105	110
Val Asn Glu Pro Pro Gln Phe Gln Gly Asn Leu Ala Glu Gly Leu His		
115	120	125
Leu Tyr Ile Val Glu Arg Ala Asn Pro Gly Phe Ile Tyr Gln Val Glu		
130	135	140
Ala Phe Asp Pro Glu Asp Thr Ser Arg Asn Ile Pro Leu Ser Tyr Phe		
145	150	155
Leu Ile Ser Pro Pro Lys Ser Phe Arg Met Ser Ala Asn Gly Thr Leu		
165	170	175
Phe Ser Thr Thr Glu Leu Asp Phe Glu Ala Arg His Arg Ser Phe His		
180	185	190
Leu Ile Val Glu Val Arg Asp Ser Gly Gly Leu Lys Ala Ser Thr Glu		
195	200	205
Leu Gln Val Asn Ile Val Asn Leu Asn Asp Glu Val Pro Arg Phe Thr		
210	215	220
Ser Pro Thr Arg Val Tyr Thr Val Leu Glu Glu Leu Ser Pro Gly Thr		
225	230	235
Ile Val Ala Asn Ile Thr Ala Glu Asp Pro Asp Asp Glu Gly Phe Pro		
245	250	255
Ser His Leu Leu Tyr Ser Ile Thr Thr Val Ser Lys Tyr Phe Met Ile		
260	265	270
Asn Gln Leu Thr Gly Thr Ile Gln Val Ala Gln Arg Ile Asp Arg Asp		
275	280	285
Ala Gly Glu Leu Arg Gln Asn Pro Thr Ile Ser Leu Glu Val Leu Val		
290	295	300
Lys Asp Arg Pro Tyr Gly Gly Gln Glu Asn Arg Ile Gln Ile Thr Phe		
305	310	315
Ile Val Glu Asp Val Asn Asp Asn Pro Ala Thr Cys Gln Lys Phe Thr		
325	330	335
Phe Ser Ile Met Val Pro Glu Arg Thr Ala Lys Gly Thr Leu Leu Leu		
340	345	350
Asp Leu Asn Lys Phe Cys Phe Asp Asp Asp Ser Glu Ala Pro Asn Asn		
355	360	365
Arg Phe Asn Phe Thr Met Pro Ser Gly Val Gly Ser Gly Ser Arg Phe		
370	375	380
Leu Gln Asp Pro Ala Gly Ser Gly Lys Ile Val Leu Ile Gly Asp Leu		

385	390	395	400
Asp Tyr Glu Asn Pro Ser Asn Leu Ala Ala Gly Asn Lys Tyr Thr Val			
405	410	415	
Ile Ile Gln Val Gln Asp Val Ala Pro Pro Tyr Tyr Lys Asn Asn Val			
420	425	430	
Tyr Val Tyr Ile Leu Thr Ser Pro Glu Asn Glu Phe Pro Leu Ile Phe			
435	440	445	
Asp Arg Pro Ser Tyr Val Phe Asp Val Ser Glu Arg Arg Pro Ala Arg			
450	455	460	
Thr Arg Val Gly Gln Val Arg Ala Thr Asp Lys Asp Leu Pro Gln Ser			
465	470	475	480
Ser Leu Leu Tyr Ser Ile Ser Thr Gly Gly Ala Ser Leu Gln Tyr Pro			
485	490	495	
Asn Val Phe Trp Ile Asn Pro Lys Thr Gly Glu Leu Gln Leu Val Thr			
500	505	510	
Lys Val Asp Cys Glu Thr Thr Pro Ile Tyr Ile Leu Arg Ile Gln Ala			
515	520	525	
Thr Asn Asn Glu Asp Thr Ser Ser Val Thr Val Thr Val Asn Ile Leu			
530	535	540	
Glu Glu Asn Asp Glu Lys Pro Ile Cys Thr Pro Asn Ser Tyr Phe Leu			
545	550	555	560
Ala Leu Pro Val Asp Leu Lys Val Gly Thr Asn Ile Gln Asn Phe Lys			
565	570	575	
Leu Thr Cys Thr Asp Leu Asp Ser Ser Pro Arg Ser Phe Arg Tyr Ser			
580	585	590	
Ile Gly Pro Gly Asn Val Asn Asn His Phe Thr Phe Ser Pro Asn Ala			
595	600	605	
Gly Ser Asn Val Thr Arg Pro Leu Leu Thr Ser Arg Phe Asp Tyr Ala			
610	615	620	
Gly Gly Phe Asp Lys Ile Trp Asp Tyr Lys Leu Leu Val Tyr Val Thr			
625	630	635	640
Asp Asp Asn Leu Met Ser Asp Lys Lys Lys Ala Glu Ala Leu Val Glu			
645	650	655	
Thr Gly Thr Val Thr Leu Ser Ile Lys Val Ile Pro His Pro Thr Thr			
660	665	670	
Ile Ile Thr Thr Thr Pro Arg Pro Arg Val Thr Tyr Gln Val Leu Arg			

<211> 530

<213> Homo sapiens

Met Glu Gly Pro Leu Thr Pro Pro Pro Leu Gln Gly Gly Gly Ala Ala
1 5 10 15
Ala Val Pro Glu Pro Gly Ala Arg Gln His Pro Gly His Glu Thr Ala

20	25	30
Ala Gln Arg Tyr Ser Ala Arg Leu Leu Gln Ala Gly Tyr Glu Pro Glu		
35	40	45
Ser Asp Phe Leu Ile Leu Pro Gly Phe Ile Asp Phe Ile Ala Asp Glu		
50	55	60
Val Asp Leu Thr Ser Ala Leu Thr Arg Lys Ile Thr Leu Lys Thr Pro		
65	70	75
Leu Ile Ser Ser Pro Met Asp Thr Val Thr Glu Ala Asp Met Ala Phe		
85	90	95
Ala Met Ala Leu Met Gly Gly Ile Gly Phe Ile His His Asn Cys Thr		
100	105	110
Pro Glu Phe Gln Ala Asn Glu Val Arg Lys Val Lys Lys Phe Glu Gln		
115	120	125
Gly Phe Ile Thr Asp Pro Val Val Leu Ser Pro Ser His Thr Val Gly		
130	135	140
Asp Val Leu Glu Ala Lys Met Arg His Gly Phe Ser Gly Ile Pro Ile		
145	150	155
Thr Glu Thr Gly Thr Met Gly Ser Lys Leu Val Gly Ile Val Thr Ser		
165	170	175
Arg Asp Ile Asp Phe Leu Ala Glu Lys Asp His Thr Thr Leu Leu Ser		
180	185	190
Glu Val Met Thr Pro Arg Ile Glu Leu Val Val Ala Pro Ala Gly Val		
195	200	205
Thr Leu Lys Glu Ala Asn Glu Ile Leu Gln Arg Ser Lys Lys Gly Lys		
210	215	220
Leu Pro Ile Val Asn Asp Cys Asp Glu Leu Val Ala Ile Ile Ala Arg		
225	230	235
Thr Asp Leu Lys Lys Asn Arg Asp Tyr Pro Leu Ala Ser Lys Asp Ser		
245	250	255
Gln Lys Gln Leu Leu Cys Gly Ala Ala Val Gly Thr Arg Glu Asp Asp		
260	265	270
Lys Tyr Arg Leu Asp Leu Leu Thr Gln Ala Gly Val Asp Val Ile Val		
275	280	285
Leu Asp Ser Ser Gln Gly Asn Ser Val Tyr Gln Ile Ala Met Val His		
290	295	300

Tyr Ile Lys Gln Lys Tyr Pro His Leu Gln Val Ile Gly Gly Asn Val
 305 310 315 320
 Val Thr Ala Ala Gln Ala Lys Asn Leu Ile Asp Ala Gly Val Asp Gly
 325 330 335
 Leu Arg Val Gly Met Gly Cys Gly Ser Ile Cys Ile Thr Gln Glu Val
 340 345 350
 Met Ala Cys Gly Arg Pro Gln Gly Thr Ala Val Tyr Lys Val Ala Glu
 355 360 365
 Tyr Ala Arg Arg Phe Gly Val Pro Ile Ile Ala Asp Gly Gly Ile Gln
 370 375 380
 Thr Val Gly His Val Val Lys Ala Leu Ala Leu Gly Ala Ser Thr Val
 385 390 395 400
 Met Met Gly Ser Leu Leu Ala Ala Thr Thr Glu Ala Pro Gly Glu Tyr
 405 410 415
 Phe Phe Ser Asp Gly Val Arg Leu Lys Lys Tyr Arg Gly Met Gly Ser
 420 425 430
 Leu Asp Ala Met Glu Lys Ser Ser Ser Ser Gln Lys Arg Tyr Phe Ser
 435 440 445
 Glu Gly Asp Lys Val Lys Ile Ala Gln Gly Val Ser Gly Ser Ile Gln
 450 455 460
 Asp Lys Gly Ser Ile Gln Lys Phe Val Pro Tyr Leu Ile Ala Gly Ile
 465 470 475 480
 Gln His Gly Cys Gln Asp Ile Gly Ala Arg Ser Leu Ser Val Leu Arg
 485 490 495
 Ser Met Met Tyr Ser Gly Glu Leu Lys Phe Glu Lys Arg Thr Met Ser
 500 505 510
 Ala Gln Ile Glu Gly Gly Val His Gly Leu His Ser Tyr Glu Lys Arg
 515 520 525
 Leu Tyr
 530

<210> 4806

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4806

Met Leu Arg Asp Phe Val Thr Thr Arg Pro Ala Leu Gln Glu Ala Leu
 1 5 10 15
 Lys Glu Ala Leu Asn Met Glu Arg Lys Asn Arg Tyr Gln Pro Leu Gln
 20 25 30
 Lys Pro Tyr Gln Asn Met Lys Thr Asn Glu Ala Ile Lys Lys Leu His
 35 40 45
 Gln Leu Met Cys Lys Ile Thr Arg Ser Asn Ser His Ile Thr Ile Leu
 50 55 60
 Thr Leu Ser Val Asn Trp Leu Asn Ala Pro Ile Lys Lys His Arg Leu
 65 70 75 80
 Ala Asn Trp Ile Lys Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu
 85 90 95
 Thr His Leu Met Cys Lys Asp Thr His Arg Pro Lys Ile Lys Gly Trp
 100 105 110
 Arg Asn Ile Tyr Gln Ala Asn Gly Lys Pro Lys Lys Lys Lys Ser Gly
 115 120 125
 Gly Cys Asn Pro Ser Leu
 130

<210> 4807

<211> 505

<212> PRT

<213> Homo sapiens

<400> 4807

Met Ala Gly Ala Gln Thr Leu Leu Thr Phe Arg Asp Val Ala Ile Glu
 1 5 10 15
 Phe Ser Leu Glu Glu Trp Lys Cys Leu Asp Leu Ala Gln Gln Asn Leu
 20 25 30
 Tyr Arg Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Phe Ser Val Gly
 35 40 45
 Leu Thr Val Cys Lys Pro Gly Leu Ile Thr Cys Leu Glu Gln Arg Lys
 50 55 60

Glu Pro Trp Asn Val Lys Arg Gln Glu Ala Ala Asp Gly His Pro Ala
 65 70 75 80
 Met Ser Ser His Phe Thr Gln Asp Leu Leu Pro Glu Gln Gly Ile Gln
 85 90 95
 Asp Ala Phe Pro Lys Arg Ile Leu Arg Gly Tyr Gly Asn Cys Gly Leu
 100 105 110
 Asp Asn Leu Tyr Leu Arg Lys Asp Trp Glu Ser Leu Asp Glu Cys Lys
 115 120 125
 Leu Gln Lys Asp Tyr Asn Gly Leu Asn Gln Cys Ser Ser Thr Thr His
 130 135 140
 Ser Lys Ile Phe Gln Tyr Asn Lys Tyr Val Lys Ile Phe Asp Asn Phe
 145 150 155 160
 Ser Asn Leu His Arg Arg Asn Ile Ser Asn Thr Gly Glu Lys Pro Phe
 165 170 175
 Lys Cys Gln Glu Cys Gly Lys Ser Phe Gln Met Leu Ser Phe Leu Thr
 180 185 190
 Glu His Gln Lys Ile His Thr Gly Lys Lys Phe Gln Lys Cys Gly Glu
 195 200 205
 Cys Gly Lys Thr Phe Ile Gln Cys Ser His Phe Thr Glu Pro Glu Asn
 210 215 220
 Ile Asp Thr Gly Glu Lys Pro Tyr Lys Cys Gln Glu Cys Asn Asn Val
 225 230 235 240
 Ile Lys Thr Cys Ser Val Leu Thr Lys Asn Arg Ile Tyr Ala Gly Gly
 245 250 255
 Glu His Tyr Arg Cys Glu Glu Phe Gly Lys Val Phe Asn Gln Cys Ser
 260 265 270
 His Leu Thr Glu His Glu His Gly Thr Glu Glu Lys Pro Phe Lys Cys
 275 280 285
 Glu Glu Cys Asp Ser Ile Phe Lys Trp Phe Ser Asp Leu Thr Lys His
 290 295 300
 Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Gly
 305 310 315 320
 Lys Ala Tyr Thr Gln Ser Ser His Leu Ser Glu His Arg Arg Ile His
 325 330 335
 Thr Gly Glu Lys Pro Tyr Gln Cys Glu Glu Cys Gly Lys Val Phe Arg
 340 345 350

Thr Cys Ser Ser Leu Ser Asn His Lys Arg Thr His Ser Glu Glu Lys
 355 360 365
 Pro Tyr Thr Cys Glu Glu Cys Gly Asn Ile Phe Lys Gln Leu Ser Asp
 370 375 380
 Leu Thr Lys His Lys Lys Thr His Thr Gly Glu Lys Pro Tyr Lys Cys
 385 390 395 400
 Asp Glu Cys Gly Lys Asn Phe Thr Gln Ser Ser Asn Leu Ile Val His
 405 410 415
 Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly
 420 425 430
 Arg Val Phe Met Trp Phe Ser Asp Ile Thr Lys His Lys Lys Thr His
 435 440 445
 Thr Gly Glu Lys Pro Tyr Lys Cys Asp Glu Cys Gly Lys Asn Phe Thr
 450 455 460
 Gln Ser Ser Asn Leu Ile Val His Lys Arg Ile His Thr Gly Glu Lys
 465 470 475 480
 Pro Tyr Lys Cys Glu Lys Cys Gly Lys Ala Phe Thr Gln Phe Ser His
 485 490 495
 Leu Thr Val His Glu Ser Ile His Thr
 500 505

<210> 4808

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4808

Met Val Ala Pro Arg Lys Ile Arg Trp Cys Val Glu Glu Leu Pro Ser
 1 5 10 15
 His Cys Ser Leu His Ala Phe Leu Ser Ala Arg Cys Glu Gln Gly Arg
 20 25 30
 Pro Gly Thr Ala Asp Gly Leu His Leu Ser Asp Trp Thr Ala Thr Cys
 35 40 45
 His Thr Phe Ile Glu Leu Ser Ile Ser Thr Ala Ala Val Leu Gly Val
 50 55 60

Leu Leu Gly Ser Arg Asn Lys Lys Phe Arg Glu Ala Lys Val Leu Gln
 65 70 75 80
 Gly Cys Arg Gln Val Ile Glu Pro Ser Phe Ile Glu His Leu Leu Ser
 85 90 95
 Ala Lys Tyr Ser Tyr Leu Arg Tyr Leu Val
 100 105

<210> 4809

<211> 410

<212> PRT

<213> Homo sapiens

<400> 4809

Met Phe Val Trp Asn Gln Gly Ser Lys Tyr Ser Gly Ser Glu Val Leu
 1 5 10 15
 Trp Cys Pro Leu His Trp Asn Ser Glu Glu Leu Ile Val Phe Trp Ser
 20 25 30
 Cys Val Leu Gln Val Leu Asp Trp His Arg Leu Ile Pro Leu Thr Trp
 35 40 45
 Ala Cys Met Ala Arg Gln Thr Pro His Leu Gly Glu Gln Arg Arg Thr
 50 55 60
 Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn Gly Gly Val
 65 70 75 80
 Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val Gln Glu Pro
 85 90 95
 Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys Gln Gly Thr
 100 105 110
 Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met Ser Ser Leu
 115 120 125
 Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu Leu Ser Val
 130 135 140
 Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile Ser Glu Phe
 145 150 155 160
 Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val Leu Lys Lys
 165 170 175

Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg Lys Arg Ser
 180 185 190
 Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu Lys Arg Val
 195 200 205
 Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln Asp Ile Asn
 210 215 220
 Asp Thr Val Arg Leu Leu Lys Glu Lys Cys Leu Phe Thr Val Gln Gln
 225 230 235 240
 Val Thr Lys Ile Leu His Ser Cys Pro Ser Val Leu Arg Glu Asp Leu
 245 250 255
 Gly Gln Leu Glu Tyr Lys Phe Gln Tyr Ala Tyr Phe Arg Met Gly Ile
 260 265 270
 Lys His Pro Asp Ile Val Lys Ser Glu Tyr Leu Gln Tyr Ser Leu Thr
 275 280 285
 Lys Ile Lys Gln Arg His Ile Tyr Leu Glu Arg Leu Gly Arg Tyr Gln
 290 295 300
 Thr Pro Asp Lys Lys Gly Gln Thr Gln Ile Pro Asn Pro Leu Leu Lys
 305 310 315 320
 Asp Ile Leu Arg Val Ser Glu Ala Glu Phe Leu Ala Arg Thr Ala Cys
 325 330 335
 Thr Ser Val Glu Glu Phe Gln Val Phe Lys Lys Leu Leu Ala Arg Glu
 340 345 350
 Glu Glu Glu Ser Glu Ser Ser Thr Ser Asp Asp Lys Arg Ala Ser Leu
 355 360 365
 Asp Glu Asp Glu Asp Asp Asp Asp Glu Glu Asp Asn Asp Glu Asp Asp
 370 375 380
 Asn Asp Glu Asp Asp Asp Asp Glu Asp Asp Asp Glu Ala Glu Asp Asn
 385 390 395 400
 Asp Glu Asp Glu Asp Asp Asp Glu Glu Glu
 405 410

<210> 4810

<211> 340

<212> PRT

<213> Homo sapiens

<400> 4810

Met Ala Met Gln Met Gln Leu Glu Ala Asn Ala Asp Thr Ser Val Glu
 1 5 10 15
 Glu Glu Ser Phe Gly Pro Gln Pro Ile Ser Arg Leu Glu Gln Cys Gly
 20 25 30
 Ile Asn Ala Asn Asp Val Lys Lys Leu Glu Glu Ala Gly Phe His Thr
 35 40 45
 Val Glu Ala Val Ala Tyr Ala Pro Lys Lys Glu Leu Ile Asn Ile Lys
 50 55 60
 Gly Ile Ser Glu Ala Lys Ala Asp Lys Ile Leu Thr Glu Ser Arg Ser
 65 70 75 80
 Val Ala Arg Leu Glu Cys Asn Ser Val Ile Leu Val Tyr Cys Thr Leu
 85 90 95
 Arg Leu Ser Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg Val Val
 100 105 110
 Gly Thr Thr Gly Gly Ile Glu Thr Gly Ser Ile Thr Glu Met Phe Gly
 115 120 125
 Glu Phe Arg Thr Gly Lys Thr Gln Ile Cys His Thr Leu Ala Val Thr
 130 135 140
 Cys Gln Leu Pro Ile Asp Arg Gly Gly Gly Glu Gly Lys Ala Met Tyr
 145 150 155 160
 Ile Asp Thr Glu Gly Thr Phe Arg Pro Glu Arg Leu Leu Ala Val Ala
 165 170 175
 Glu Arg Tyr Gly Leu Ser Gly Ser Asp Val Leu Asp Asn Val Ala Tyr
 180 185 190
 Ala Arg Ala Phe Asn Thr Asp His Gln Thr Gln Leu Leu Tyr Gln Ala
 195 200 205
 Ser Ala Met Met Val Glu Ser Arg Tyr Ala Leu Leu Ile Val Asp Ser
 210 215 220

 Ala Thr Ala Leu Tyr Arg Thr Asp Tyr Ser Gly Arg Gly Glu Leu Ser
 225 230 235 240
 Ala Arg Gln Met His Leu Ala Arg Phe Leu Arg Met Leu Leu Arg Leu
 245 250 255
 Ala Asp Glu Phe Gly Val Ala Val Val Ile Thr Asn Gln Val Val Ala

260 265 270
 Gln Val Asp Gly Ala Ala Met Phe Ala Ala Asp Pro Lys Lys Pro Ile
 275 280 285
 Gly Gly Asn Ile Ile Ala His Ala Ser Thr Thr Arg Leu Tyr Leu Arg
 290 295 300
 Lys Gly Arg Gly Glu Thr Arg Ile Cys Lys Ile Tyr Asp Ser Pro Cys
 305 310 315 320
 Leu Pro Glu Ala Glu Ala Met Phe Ala Ile Asn Ala Asp Gly Val Gly
 325 330 335
 Asp Ala Lys Asp
 340

<210> 4811

<211> 698

<212> PRT

<213> Homo sapiens

<400> 4811

Met Glu Thr Arg Gly Leu Ala Asp Ser Gly Gln Gly Ser Phe Thr Gly
 1 5 10 15
 Gln Gly Ile Ala Arg Phe Gly Arg Ile Gln Lys Lys Ser Gln Pro Glu
 20 25 30
 Lys Val Val Arg Ala Ala Ser Arg Gly Arg Pro Leu Ile Gly Trp Thr
 35 40 45
 Gln Trp Cys Ala Glu Asp Gly Gly Asp Glu Ser Glu Met Ala Leu Ala
 50 55 60

 Gly Ser Pro Gly Cys Ser Ser Gly Pro Gln Gly Arg Leu Ser Arg Leu
 65 70 75 80
 Ile Phe Leu Leu Arg Arg Trp Ala Ala Arg His Val His His Gln Asp
 85 90 95
 Gln Gly Pro Asp Ser Phe Pro Asp Arg Phe Arg Gly Ala Glu Leu Lys
 100 105 110
 Glu Val Ser Ser Gln Glu Ser Asn Ala Gln Ala Asn Val Gly Ser Gln
 115 120 125

Glu Pro Ala Asp Arg Gly Arg Ser Ala Trp Pro Leu Ala Lys Cys Asn
 130 135 140
 Thr Asn Thr Ser Asn Asn Thr Glu Glu Glu Lys Lys Thr Lys Lys Lys
 145 150 155 160
 Asp Ala Ile Val Val Asp Pro Ser Ser Asn Leu Tyr Tyr Arg Trp Leu
 165 170 175
 Thr Ala Ile Ala Leu Pro Val Phe His Asn Trp Tyr Leu Leu Ile Cys
 180 185 190
 Arg Ala Cys Phe Asp Glu Leu Gln Ser Glu Tyr Leu Met Leu Trp Leu
 195 200 205
 Val Leu Asp Tyr Ser Ala Asp Val Leu Tyr Val Leu Asp Val Leu Val
 210 215 220
 Arg Ala Arg Thr Gly Phe Leu Glu Gln Gly Leu Met Val Ser Asp Thr
 225 230 235 240
 Asn Arg Leu Trp Gln His Tyr Lys Thr Thr Thr Gln Phe Lys Leu Asp
 245 250 255
 Val Leu Ser Leu Val Pro Thr Asp Leu Ala Tyr Leu Lys Val Gly Thr
 260 265 270
 Asn Tyr Pro Glu Val Arg Phe Asn Arg Leu Leu Lys Phe Ser Arg Leu
 275 280 285
 Phe Glu Phe Phe Asp Arg Thr Glu Thr Arg Thr Asn Tyr Pro Asn Met
 290 295 300
 Phe Arg Ile Gly Asn Leu Val Leu Tyr Ile Leu Ile Ile Ile His Trp
 305 310 315 320
 Asn Ala Cys Ile Tyr Phe Ala Ile Ser Lys Phe Ile Gly Phe Gly Thr
 325 330 335
 Asp Ser Trp Val Tyr Pro Asn Ile Ser Ile Pro Glu His Gly Arg Leu
 340 345 350
 Ser Arg Lys Tyr Ile Tyr Ser Leu Tyr Trp Ser Thr Leu Thr Leu Thr
 355 360 365
 Thr Ile Gly Glu Thr Pro Pro Pro Val Lys Asp Glu Glu Tyr Leu Phe
 370 375 380
 Val Val Val Asp Phe Leu Val Gly Val Leu Ile Phe Ala Thr Ile Val
 385 390 395 400
 Gly Asn Val Gly Ser Met Ile Ser Asn Met Asn Ala Ser Arg Ala Glu
 405 410 415

Phe Gln Ala Lys Ile Asp Ser Ile Lys Gln Tyr Met Gln Phe Arg Lys
 420 425 430
 Val Thr Lys Asp Leu Glu Thr Arg Val Ile Arg Trp Phe Asp Tyr Leu
 435 440 445
 Trp Ala Asn Lys Lys Thr Val Asp Glu Lys Glu Val Leu Lys Ser Leu
 450 455 460
 Pro Asp Lys Leu Lys Ala Glu Ile Ala Ile Asn Val His Leu Asp Thr
 465 470 475 480
 Leu Lys Lys Val Arg Ile Phe Gln Asp Cys Glu Ala Gly Leu Leu Val
 485 490 495
 Glu Leu Val Leu Lys Leu Arg Pro Thr Val Phe Ser Pro Gly Asp Tyr
 500 505 510
 Ile Cys Lys Lys Gly Asp Ile Gly Lys Glu Met Tyr Ile Ile Asn Glu
 515 520 525
 Gly Lys Leu Ala Val Val Ala Asp Asp Gly Val Thr Gln Phe Val Val
 530 535 540
 Leu Ser Asp Gly Ser Tyr Phe Gly Glu Ile Ser Ile Leu Asn Ile Lys
 545 550 555 560
 Gly Ser Lys Ser Gly Asn Arg Arg Thr Ala Asn Ile Arg Ser Ile Gly
 565 570 575
 Tyr Ser Asp Leu Phe Cys Leu Ser Lys Asp Asp Leu Met Glu Ala Leu
 580 585 590
 Thr Glu Tyr Pro Glu Ala Lys Lys Ala Leu Glu Glu Lys Gly Arg Gln
 595 600 605
 Ile Leu Met Lys Asp Asn Leu Ile Asp Glu Glu Leu Ala Arg Ala Gly
 610 615 620
 Ala Asp Pro Lys Asp Leu Glu Glu Lys Val Glu Gln Leu Gly Ser Ser
 625 630 635 640
 Leu Asp Thr Leu Gln Thr Arg Phe Ala Arg Leu Leu Ala Glu Tyr Asn
 645 650 655
 Ala Thr Gln Met Lys Met Lys Gln Arg Leu Ser Gln Leu Glu Ser Gln
 660 665 670
 Val Lys Gly Gly Gly Asp Lys Pro Leu Ala Asp Gly Glu Val Pro Gly
 675 680 685
 Asp Ala Thr Lys Thr Glu Asp Lys Gln Gln
 690 695

<210> 4812

<211> 544

<212> PRT

<213> Homo sapiens

<400> 4812

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Met Asp Gly Leu Asp Asn Arg Gly Glu Ile Val Val Ile Gly Ala Thr
  1             5             10             15
Asn Arg Leu Asp Ser Ile Asp Pro Ala Leu Arg Arg Pro Gly Arg Phe
      20             25             30
Asp Arg Glu Phe Leu Phe Asn Leu Pro Asp Gln Lys Ala Arg Lys His
      35             40             45
Ile Leu Gln Ile His Thr Arg Asp Trp Asn Pro Lys Leu Ser Asp Ala
      50             55             60
Phe Leu Gly Glu Leu Ala Glu Lys Cys Val Gly Tyr Cys Gly Ala Asp
      65             70             75             80
Ile Lys Ala Leu Cys Thr Glu Ala Ala Leu Ile Ala Leu Arg Arg Arg
      85             90             95
Tyr Pro Gln Ile Tyr Ala Ser Ser His Lys Leu Gln Leu Asp Val Ser
      100            105            110
Ser Ile Val Leu Ser Ala Gln Asp Phe Tyr His Ala Met Gln Asn Ile
      115            120            125
Val Pro Ala Ser Gln Arg Ala Val Met Ser Ser Gly His Ala Leu Ser
      130            135            140
Pro Ile Ile Arg Pro Leu Leu Glu Arg Ser Phe Asn Asn Ile Leu Ala
      145            150            155            160
Val Leu Gln Lys Val Phe Pro His Ala Glu Ile Ser Gln Ser Asp Lys
      165            170            175
Lys Glu Asp Ile Glu Thr Leu Ile Leu Glu Asp Ser Glu Asp Glu Asn
      180            185            190
Ala Leu Ser Ile Phe Glu Thr Asn Cys His Ser Gly Ser Pro Lys Lys
      195            200            205
Gln Ser Ser Ser Ala Ala Ile His Lys Pro Tyr Leu His Phe Thr Met
      210            215            220

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Ser	Pro	Tyr	His	Gln	Pro	Thr	Ser	Tyr	Arg	Pro	Arg	Leu	Leu	Leu	Ser
225					230					235					240
Gly	Glu	Arg	Gly	Ser	Gly	Gln	Thr	Ser	His	Leu	Ala	Pro	Ala	Leu	Leu
				245					250					255	
His	Thr	Leu	Glu	Arg	Phe	Ser	Val	His	Arg	Leu	Asp	Leu	Pro	Ala	Leu
				260				265					270		
Tyr	Ser	Val	Ser	Ala	Lys	Thr	Pro	Glu	Glu	Ser	Cys	Ala	Gln	Ile	Phe
		275					280					285			
Arg	Glu	Ala	Arg	Arg	Thr	Val	Pro	Ser	Ile	Val	Tyr	Met	Pro	His	Ile
	290					295					300				
Gly	Asp	Trp	Trp	Glu	Ala	Val	Ser	Glu	Thr	Val	Arg	Ala	Thr	Phe	Leu
305					310					315					320
Thr	Leu	Leu	Gln	Asp	Ile	Pro	Ser	Phe	Ser	Pro	Ile	Phe	Leu	Leu	Ser
				325					330					335	
Thr	Ser	Glu	Thr	Met	Tyr	Ser	Glu	Leu	Pro	Glu	Glu	Val	Lys	Cys	Ile
		340						345					350		
Phe	Arg	Ile	Gln	Tyr	Glu	Glu	Val	Leu	Tyr	Ile	Gln	Arg	Pro	Ile	Glu
	355						360					365			
Glu	Asp	Arg	Arg	Lys	Phe	Phe	Gln	Glu	Leu	Ile	Leu	Asn	Gln	Ala	Ser
	370					375					380				
Met	Ala	Pro	Pro	Arg	Arg	Lys	His	Ala	Ala	Leu	Cys	Ala	Met	Glu	Val
385				390						395					400
Leu	Pro	Leu	Ala	Leu	Pro	Ser	Pro	Pro	Arg	Gln	Leu	Ser	Glu	Ser	Glu
				405					410					415	
Lys	Ser	Arg	Met	Glu	Asp	Gln	Glu	Glu	Asn	Thr	Leu	Arg	Glu	Leu	Arg
		420						425					430		
Leu	Phe	Leu	Arg	Asp	Val	Thr	Lys	Arg	Leu	Ala	Thr	Asp	Lys	Arg	Phe
	435						440					445			
Asn	Ile	Phe	Ser	Lys	Pro	Val	Asp	Ile	Glu	Glu	Val	Ser	Asp	Tyr	Leu
	450					455				460					
Glu	Val	Ile	Lys	Glu	Pro	Met	Asp	Leu	Ser	Thr	Val	Ile	Thr	Lys	Ile
465					470					475					480
Asp	Lys	His	Asn	Tyr	Leu	Thr	Ala	Lys	Asp	Phe	Leu	Lys	Asp	Ile	Asp
				485					490					495	
Leu	Ile	Cys	Ser	Asn	Ala	Leu	Glu	Tyr	Asn	Pro	Asp	Lys	Asp	Pro	Gly
		500						505					510		

Asp Lys Ile Ile Arg His Arg Ala Cys Thr Leu Lys Asp Thr Ala His
 515 520 525
 Ala Ile Ile Ala Ala Glu Leu Asp Pro Glu Phe Asn Lys Leu Cys Glu
 530 535 540

<210> 4813

<211> 334

<212> PRT

<213> Homo sapiens

<400> 4813

Met Val Gly Gln Gly Cys Ser Leu Glu Pro Arg Leu Asp Leu Arg Pro
 1 5 10 15
 Leu Gly Asn Pro Arg Ser Lys Gln Ser Arg His Gln Ser Trp Val Trp
 20 25 30
 Glu Arg Gln Glu Gly Glu Arg Asn Gly Gly Ser Lys Glu Gly Lys Glu
 35 40 45
 Gly Gly Arg Gly Gly Ser Lys Thr Val Ile Pro Ile Pro Ile Ser Asp
 50 55 60
 Leu Glu Leu Ala Ser Thr Pro Val His Pro Cys Arg Gly Gly Pro Ser
 65 70 75 80
 Pro Gln Leu Leu Pro Arg Glu Tyr Gly Gly Gly Val Gly Ile Leu Trp
 85 90 95

Leu Ser Ser Leu Pro Leu Leu Cys Arg Leu Met Leu Gly Phe Met Gly
 100 105 110
 Val Thr Ala Leu Leu Ser Met Trp Ile Ser Asn Thr Ala Thr Thr Ala
 115 120 125
 Met Met Val Pro Ile Val Glu Ala Ile Leu Gln Gln Met Glu Ala Thr
 130 135 140
 Ser Ala Ala Thr Glu Ala Gly Leu Glu Leu Val Asp Lys Gly Lys Ala
 145 150 155 160
 Lys Glu Leu Pro Gly Ser Gln Val Ile Phe Glu Gly Pro Thr Leu Gly
 165 170 175
 Gln Gln Glu Asp Gln Glu Arg Lys Arg Leu Cys Lys Ala Met Thr Leu

	180		185		190										
Cys	Ile	Cys	Tyr	Ala	Ala	Ser	Ile	Gly	Gly	Thr	Ala	Thr	Leu	Thr	Gly
	195						200					205			
Thr	Gly	Pro	Asn	Val	Val	Leu	Leu	Gly	Gln	Met	Asn	Glu	Leu	Phe	Pro
	210					215					220				
Asp	Ser	Lys	Asp	Leu	Val	Asn	Phe	Ala	Ser	Trp	Phe	Ala	Phe	Ala	Phe
225				230					235					240	
Pro	Asn	Met	Leu	Val	Met	Leu	Leu	Phe	Ala	Trp	Leu	Trp	Leu	Gln	Phe
			245					250					255		
Val	Tyr	Met	Arg	Phe	Asn	Phe	Lys	Lys	Ser	Trp	Gly	Cys	Gly	Leu	Glu
	260					265					270				
Ser	Lys	Lys	Asn	Glu	Lys	Ala	Ala	Leu	Lys	Val	Leu	Gln	Glu	Glu	Tyr
	275					280					285				
Arg	Lys	Leu	Gly	Pro	Leu	Ser	Phe	Ala	Glu	Ile	Asn	Val	Leu	Ile	Cys
	290					295					300				
Phe	Phe	Leu	Leu	Val	Ile	Leu	Trp	Phe	Ser	Arg	Asp	Pro	Gly	Phe	Met
305				310					315					320	
Pro	Gly	Trp	Leu	Thr	Val	Ala	Trp	Val	Glu	Gly	Glu	Thr	Lys		
			325					330							

<210> 4814

<211> 451

<212> PRT

<213> Homo sapiens

<400> 4814

Met	Asn	Lys	Ala	Pro	Gln	Ser	Thr	Gly	Pro	Pro	Pro	Ala	Pro	Ser	Pro
1			5					10					15		
Gly	Leu	Pro	Gln	Pro	Ala	Phe	Pro	Pro	Gly	Gln	Thr	Ala	Pro	Val	Val
		20					25				30				
Phe	Ser	Thr	Pro	Gln	Ala	Thr	Gln	Met	Asn	Thr	Pro	Ser	Gln	Pro	Arg
	35					40					45				
Gln	His	Phe	Tyr	Pro	Ser	Arg	Ala	Gln	Pro	Pro	Ser	Ser	Ala	Ala	Ser
	50				55						60				
Arg	Val	Gln	Ser	Ala	Ala	Pro	Ala	Arg	Pro	Gly	Pro	Ala	Ala	Leu	Pro

65	70	75	80
Pro Val Ser Pro Leu Lys Ala Ala Leu Ser Glu Glu Glu Leu Glu Lys			
	85	90	95
Lys Ser Lys Ala Ile Ile Glu Glu Tyr Leu His Leu Asn Asp Met Lys			
	100	105	110
Glu Ala Val Gln Cys Val Gln Glu Leu Ala Ser Pro Ser Leu Leu Phe			
	115	120	125
Ile Phe Val Arg His Gly Val Glu Ser Thr Leu Glu Arg Ser Ala Ile			
	130	135	140
Ala Arg Glu His Met Gly Gln Leu Leu His Gln Leu Leu Cys Ala Gly			
145	150	155	160
His Leu Ser Thr Ala Gln Tyr Tyr Gln Gly Leu Tyr Glu Ile Leu Glu			
	165	170	175
Leu Ala Glu Asp Met Glu Ile Asp Ile Pro His Val Trp Leu Tyr Leu			
	180	185	190
Ala Glu Leu Val Thr Pro Ile Leu Gln Glu Gly Gly Val Pro Met Gly			
	195	200	205
Glu Leu Phe Arg Glu Ile Thr Lys Pro Leu Arg Pro Leu Gly Lys Ala			
	210	215	220
Ala Ser Leu Leu Leu Glu Ile Leu Gly Leu Leu Cys Lys Ser Met Gly			
225	230	235	240
Pro Lys Lys Val Gly Thr Leu Trp Arg Glu Ala Gly Leu Ser Trp Lys			
	245	250	255
Glu Phe Leu Pro Glu Gly Gln Asp Ile Gly Ala Phe Val Ala Glu Gln			
	260	265	270
Lys Val Glu Tyr Thr Leu Gly Glu Glu Ser Glu Ala Pro Gly Gln Arg			
	275	280	285
Ala Leu Pro Ser Glu Glu Leu Asn Arg Gln Leu Glu Lys Leu Leu Lys			
	290	295	300
Glu Gly Ser Ser Asn Gln Arg Val Phe Asp Trp Ile Glu Ala Asn Leu			
305	310	315	320
Ser Glu Gln Gln Ile Val Ser Asn Thr Leu Val Arg Ala Leu Met Thr			
	325	330	335
Ala Val Cys Tyr Ser Ala Ile Ile Phe Glu Thr Pro Leu Arg Val Asp			
	340	345	350
Val Ala Val Leu Lys Ala Arg Ala Lys Leu Leu Gln Lys Tyr Leu Cys			

355 360 365
 Asp Glu Gln Lys Glu Leu Gln Ala Leu Tyr Ala Leu Gln Ala Leu Val
 370 375 380
 Val Thr Leu Glu Gln Pro Pro Asn Leu Leu Arg Met Phe Phe Asp Ala
 385 390 395 400
 Leu Tyr Asp Glu Asp Val Val Lys Glu Asp Ala Phe Tyr Ser Trp Glu
 405 410 415
 Ser Ser Lys Asp Pro Ala Glu Gln Gln Gly Lys Gly Val Ala Leu Lys
 420 425 430
 Ser Val Thr Ala Phe Phe Lys Trp Leu Arg Glu Ala Glu Glu Glu Ser
 435 440 445
 Asp His Asn
 450

<210> 4815

<211> 694

<212> PRT

<213> Homo sapiens

<400> 4815

Met Glu Arg Ala Met Glu Gln Leu Asn Arg Leu Thr Arg Ser Leu Arg
 1 5 10 15
 Arg Ala Arg Thr Val Glu Leu Pro Glu Asp Asn Glu Thr Ala Val Tyr
 20 25 30
 Thr Leu Met Pro Met Val Met Ala Asp Gln His Arg Ser Val Ser Glu
 35 40 45
 Leu Leu Ser Asn Ser Lys Phe Asp Val Asn Tyr Ala Phe Gly Arg Val
 50 55 60
 Lys Arg Ser Leu Leu His Ile Ala Ala Asn Cys Gly Ser Val Glu Cys
 65 70 75 80
 Leu Val Leu Leu Leu Lys Lys Gly Ala Asn Pro Asn Tyr Gln Asp Ile
 85 90 95
 Ser Gly Cys Thr Pro Leu His Leu Ala Ala Arg Asn Gly Gln Lys Lys
 100 105 110
 Cys Met Ser Lys Leu Leu Glu Tyr Ser Ala Asp Val Asn Ile Cys Asn

115	120	125	
Asn Glu Gly Pro Thr Ala Ile His Trp Leu Ala Val Asn Gly Arg Thr			
130	135	140	
Glu Leu Leu His Asp Leu Val Gln His Val Ser Asp Val Asp Val Glu			
145	150	155	160
Asp Ala Met Gly Gln Thr Ala Leu His Val Ala Cys Gln Asn Gly His			
165	170	175	
Lys Thr Thr Val Gln Cys Leu Leu Asp Ser Gly Ala Asp Ile Asn Arg			
180	185	190	
Pro Asn Val Ser Gly Ala Thr Pro Leu Tyr Phe Ala Cys Ser His Gly			
195	200	205	
Gln Arg Asp Thr Ala Gln Ile Leu Leu Leu Arg Gly Ala Lys Tyr Leu			
210	215	220	
Pro Asp Lys Asn Gly Val Thr Pro Leu Asp Leu Cys Val Gln Gly Gly			
225	230	235	240
Tyr Gly Glu Thr Cys Glu Val Leu Ile Gln Tyr His Pro Arg Leu Phe			
245	250	255	
Gln Thr Ile Ile Gln Met Thr Gln Asn Glu Asp Leu Arg Glu Asn Met			
260	265	270	
Leu Arg Gln Val Leu Glu His Leu Ser Gln Gln Ser Glu Ser Gln Tyr			
275	280	285	
Leu Lys Ile Leu Thr Ser Leu Ala Glu Val Ser Thr Thr Asn Gly His			
290	295	300	
Lys Leu Leu Ser Leu Ser Ser Asn Tyr Asp Ala Gln Met Lys Ser Leu			
305	310	315	320
Leu Arg Ile Val Arg Met Phe Cys His Val Phe Arg Ile Gly Pro Ser			
325	330	335	
Ser Pro Ser Asn Gly Ile Asp Met Gly Tyr Asn Gly Asn Lys Thr Pro			
340	345	350	
Arg Ser Gln Val Phe Lys Pro Leu Glu Leu Leu Trp His Ser Leu Asp			
355	360	365	
Glu Trp Leu Val Leu Ile Ala Thr Glu Leu Met Lys Asn Lys Arg Asp			
370	375	380	
Ser Thr Glu Ile Thr Ser Ile Leu Leu Lys Gln Lys Gly Gln Asp Gln			
385	390	395	400
Asp Ala Ala Ser Ile Pro Pro Phe Glu Pro Pro Gly Pro Gly Ser Tyr			

	405		410		415
Glu Asn Leu Ser Thr Gly Thr Arg Glu Ser Lys Pro Asp Ala Leu Ala					
	420		425		430
Gly Arg Gln Glu Ala Ser Ala Asp Cys Gln Asp Val Ile Ser Met Thr					
	435		440		445
Ala Asn Arg Leu Ser Ala Val Ile Gln Ala Phe Tyr Met Cys Cys Ser					
	450		455		460
Cys Gln Met Pro Pro Gly Met Thr Ser Pro Arg Phe Ile Glu Phe Val					
465		470		475	480
Cys Lys His Asp Glu Val Leu Lys Cys Phe Val Asn Arg Asn Pro Lys					
	485		490		495
Ile Ile Phe Asp His Phe His Phe Leu Leu Glu Cys Pro Glu Leu Met					
	500		505		510
Ser Arg Phe Met His Ile Ile Lys Ala Gln Ala Glu Tyr Val Gln Leu					
	515		520		525
Val Thr Glu Leu Arg Met Thr Arg Ala Ile Gln Pro Gln Ile Asn Ala					
	530		535		540
Phe Leu Gln Gly Phe His Met Phe Ile Pro Pro Ser Leu Ile Gln Leu					
545		550		555	560
Phe Asp Glu Tyr Glu Leu Glu Leu Leu Leu Ser Gly Met Pro Glu Ile					
	565		570		575
Asp Val Ser Asp Trp Ile Lys Asn Thr Glu Tyr Thr Ser Gly Tyr Glu					
	580		585		590
Arg Glu Asp Pro Val Ile Gln Trp Phe Trp Glu Val Val Glu Asp Ile					
	595		600		605
Thr Gln Glu Glu Arg Val Leu Leu Leu Gln Phe Val Thr Gly Ser Ser					
	610		615		620
Arg Val Pro His Gly Gly Phe Ala Asn Ile Met Gly Gly Ser Gly Leu					
625		630		635	640
Gln Asn Phe Thr Ile Ala Ala Val Pro Tyr Thr Pro Asn Leu Leu Pro					
	645		650		655
Thr Ser Ser Thr Cys Ile Asn Met Leu Lys Leu Pro Glu Tyr Pro Ser					
	660		665		670
Lys Glu Ile Leu Lys Asp Arg Leu Leu Val Ala Leu His Cys Gly Ser					
	675		680		685
Tyr Gly Tyr Thr Met Ala					

690

<210> 4816

<211> 649

<212> PRT

<213> Homo sapiens

<400> 4816

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Met Pro Lys Ala Glu Ala Asn Leu Gly Gly Leu Ser Ser Leu Val Val
  1             5             10             15
Asn Thr Pro Ile Thr Ser Val Ser Leu Ser His Ser Ser Ser Glu Ser
      20             25             30
Ser Lys Met Ser Glu Ser Lys Asp Gln Glu Asn Asn Cys Glu Arg Pro
      35             40             45
Lys Glu Ser Asn Val Leu His Pro Asn Gly Glu Cys Pro Val Lys Ser
      50             55             60
Glu Pro Thr Glu Pro Gly Asp Glu Asp Glu Glu Asp Ala Tyr Ser Asn
      65             70             75             80
Glu Leu Asp Asp Glu Glu Val Leu Gly Glu Leu Thr Asp Ser Ile Gly
      85             90             95
Asn Lys Asp Phe Pro Leu Leu Asn Gln Ser Ile Ser Pro Leu Ser Ser
      100            105            110
Ser Val Leu Lys Phe Ile Glu Lys Gly Thr Ser Ser Ser Ser Ala Thr
      115            120            125
Val Ser Asp Asp Thr Glu Lys Lys Lys Gln Thr Ala Ala Val Arg Ala
      130            135            140
Ser Gly Ser Val Ala Ser Asn Tyr Gly Ile Ser Gly Lys Asp Phe Ala
      145            150            155            160
Asp Ala Ser Ala Ser Lys Asp Ser Ala Thr Ala Ala His Pro Ser Glu
      165            170            175
Ile Ala Arg Gly Asp Glu Asp Ser Ser Ala Thr Pro His Gln His Gly
      180            185            190
Phe Thr Pro Ser Thr Pro Gly Thr Pro Gly Pro Gly Gly Asp Gly Ser
      195            200            205
Pro Gly Ser Gly Ile Glu Cys Pro Lys Cys Asp Thr Val Leu Gly Ser

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210	215	220	
Ser Arg Ser Leu Gly Gly His Met Thr Met Met His Ser Arg Asn Ser			
225	230	235	240
Cys Lys Thr Leu Lys Cys Pro Lys Cys Asn Trp His Tyr Lys Tyr Gln			
	245	250	255
Gln Thr Leu Glu Ala His Met Lys Glu Lys His Pro Glu Pro Gly Gly			
	260	265	270
Ser Cys Val Tyr Cys Lys Thr Gly Gln Pro His Pro Arg Leu Ala Arg			
	275	280	285
Gly Glu Ser Tyr Thr Cys Gly Tyr Lys Pro Phe Arg Cys Glu Val Cys			
	290	295	300
Asn Tyr Ser Thr Thr Thr Lys Gly Asn Leu Ser Ile His Met Gln Ser			
305	310	315	320
Asp Lys His Leu Asn Asn Val Gln Asn Leu Gln Asn Gly Asn Gly Glu			
	325	330	335
Gln Val Phe Gly His Ser Ala Pro Ala Pro Asn Thr Ser Leu Ser Gly			
	340	345	350
Cys Gly Thr Pro Ser Pro Ser Lys Pro Lys Gln Lys Pro Thr Trp Arg			
	355	360	365
Cys Glu Val Cys Asp Tyr Glu Thr Asn Val Ala Arg Asn Leu Arg Ile			
	370	375	380
His Met Thr Ser Glu Lys His Met His Asn Met Met Leu Leu Gln Gln			
385	390	395	400
Asn Met Lys Gln Ile Gln His Asn Leu His Leu Gly Leu Ala Pro Ala			
	405	410	415
Glu Ala Glu Leu Tyr Gln Tyr Tyr Leu Ala Gln Asn Ile Gly Leu Thr			
	420	425	430
Gly Met Lys Leu Glu Asn Pro Ala Asp Pro Gln Leu Met Ile Asn Pro			
	435	440	445
Phe Gln Leu Asp Pro Ala Thr Ala Ala Ala Leu Ala Pro Gly Leu Gly			
	450	455	460
Glu Leu Ser Pro Tyr Ile Ser Asp Pro Ala Leu Lys Leu Phe Gln Cys			
465	470	475	480
Ala Val Cys Asn Lys Phe Thr Ser Asp Ser Leu Glu Ala Leu Ser Val			
	485	490	495
His Val Ser Ser Glu Arg Ser Leu Pro Glu Glu Glu Trp Arg Ala Val			

500	505	510
Ile Gly Asp Ile Tyr Gln Cys Lys Leu Cys Asn Tyr Asn Thr Gln Leu		
515	520	525
Lys Ala Asn Phe Gln Leu His Cys Glu Thr Asp Lys His Met Gln Lys		
530	535	540
Tyr Gln Leu Val Ala His Ile Lys Glu Gly Gly Lys Ser Asn Glu Trp		
545	550	555
Arg Leu Lys Cys Ile Ala Ile Gly Asn Pro Val His Leu Lys Cys Asn		
565	570	575
Ala Cys Asp Tyr Tyr Thr Asn Ser Val Asp Lys Leu Arg Leu His Thr		
580	585	590
Thr Asn His Arg His Glu Ala Ala Leu Lys Leu Tyr Lys Val Ser Ser		
595	600	605
Asp Ile His Phe Arg Trp His Arg Val Glu Lys Gly Ile Asn Ser Phe		
610	615	620
Arg Ala Trp Ser Thr Ser Leu Gln Leu Lys Glu Lys Lys Arg Glu Lys		
625	630	635
Thr Ser Lys Gly Arg Gly His Ser Phe		
645		

<210> 4817

<211> 808

<212> PRT

<213> Homo sapiens

<400> 4817

Met Leu Glu Gly His Glu Ser Tyr Asp Thr Glu Asn Phe Tyr Phe Arg		
1	5	10
Glu Ile Arg Lys Asn Leu Gln Glu Val Asp Phe Gln Trp Lys Asp Gly		
20	25	30
Glu Ile Asn Tyr Lys Glu Gly Pro Met Thr His Lys Asn Asn Leu Thr		
35	40	45
Gly Gln Arg Val Arg His Ser Gln Gly Asp Val Glu Asn Lys His Met		
50	55	60

Glu Asn Gln Leu Ile Leu Arg Phe Gln Ser Gly Leu Gly Glu Leu Gln
 65 70 75 80
 Lys Phe Gln Thr Ala Glu Lys Ile Tyr Gly Cys Asn Gln Ile Glu Arg
 85 90 95
 Thr Val Asn Asn Cys Phe Leu Ala Ser Pro Leu Gln Arg Ile Phe Pro
 100 105 110
 Gly Val Gln Thr Asn Ile Ser Arg Lys Tyr Gly Asn Asp Phe Leu Gln
 115 120 125
 Leu Ser Leu Pro Thr Gln Asp Glu Lys Thr His Ile Arg Glu Lys Pro
 130 135 140
 Tyr Ile Gly Asn Glu Cys Gly Lys Ala Phe Arg Val Ser Ser Ser Leu
 145 150 155 160
 Ile Asn His Gln Met Ile His Thr Thr Glu Lys Pro Tyr Arg Cys Asn
 165 170 175
 Glu Ser Gly Lys Ala Phe His Arg Gly Ser Leu Leu Thr Val His Gln
 180 185 190
 Ile Val His Thr Arg Gly Lys Pro Tyr Gln Cys Asp Val Cys Gly Arg
 195 200 205
 Ile Phe Arg Gln Asn Ser Asp Leu Val Asn His Arg Arg Ser His Thr
 210 215 220
 Gly Asp Lys Pro Tyr Ile Cys Asn Glu Cys Gly Lys Ser Phe Ser Lys
 225 230 235 240
 Ser Ser His Leu Ala Val His Gln Arg Ile His Thr Gly Glu Lys Pro
 245 250 255
 Tyr Lys Cys Asn Arg Cys Gly Lys Cys Phe Ser Gln Ser Ser Ser Leu
 260 265 270
 Ala Thr His Gln Thr Val His Thr Gly Asp Lys Pro Tyr Lys Cys Asn
 275 280 285
 Glu Cys Gly Lys Thr Phe Lys Arg Asn Ser Ser Leu Thr Ala His His
 290 295 300
 Ile Ile His Ala Gly Lys Lys Pro Tyr Thr Cys Asp Val Cys Gly Lys
 305 310 315 320
 Val Phe Tyr Gln Asn Ser Gln Leu Val Arg His Gln Ile Ile His Thr
 325 330 335
 Gly Glu Thr Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Phe Gln
 340 345 350

Arg Ser Arg Leu Ala Gly His Arg Arg Ile His Thr Gly Glu Lys Pro
 355 360 365
 Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Ser Gln His Ser His Leu
 370 375 380
 Ala Val His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
 385 390 395 400
 Glu Cys Gly Lys Ala Phe Asn Trp Gly Ser Leu Leu Thr Val His Gln
 405 410 415
 Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Val Cys Gly Lys
 420 425 430
 Val Phe Asn Tyr Gly Gly Tyr Leu Ser Val His Met Arg Cys His Thr
 435 440 445
 Gly Glu Lys Pro Leu His Cys Asn Lys Cys Gly Met Val Phe Thr Tyr
 450 455 460
 Tyr Ser Cys Leu Ala Arg His Gln Arg Met His Thr Gly Glu Lys Pro
 465 470 475 480
 Tyr Lys Cys Asn Val Cys Gly Lys Val Phe Ile Asp Ser Gly Asn Leu
 485 490 495
 Ser Ile His Arg Arg Ser His Thr Gly Glu Lys Pro Phe Gln Cys Asn
 500 505 510
 Glu Cys Gly Lys Val Phe Ser Tyr Tyr Ser Cys Leu Ala Arg His Arg
 515 520 525
 Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Asp Cys Gly Lys
 530 535 540
 Ala Tyr Thr Gln Arg Ser Ser Leu Thr Lys His Leu Val Ile His Thr
 545 550 555 560
 Gly Glu Asn Pro Tyr His Cys Asn Glu Phe Gly Glu Ala Phe Ile Gln
 565 570 575
 Ser Ser Lys Leu Ala Arg Tyr His Arg Asn Pro Thr Gly Glu Lys Pro
 580 585 590
 His Lys Cys Ser Glu Cys Gly Arg Thr Phe Ser His Lys Thr Ser Leu
 595 600 605
 Val Tyr His Gln Arg Arg His Thr Gly Glu Met Pro Tyr Lys Cys Ile
 610 615 620
 Glu Cys Gly Lys Val Phe Asn Ser Thr Thr Thr Leu Ala Arg His Arg
 625 630 635 640

Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys
 645 650 655
 Val Phe Arg Tyr Arg Ser Gly Leu Ala Arg His Trp Ser Ile His Thr
 660 665 670
 Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Arg Val
 675 680 685
 Arg Ser Ile Leu Leu Asn His Gln Met Met His Thr Gly Glu Lys Pro
 690 695 700
 Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ile Glu Arg Ser Asn Leu
 705 710 715 720
 Val Tyr His Gln Arg Asn His Thr Gly Glu Lys Pro Tyr Lys Cys Met
 725 730 735
 Glu Cys Gly Lys Ala Phe Gly Arg Arg Ser Cys Leu Thr Lys His Gln
 740 745 750
 Arg Ile His Ser Ser Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys
 755 760 765
 Ser Tyr Ile Ser Arg Ser Gly Leu Thr Lys His Gln Ile Lys His Ala
 770 775 780
 Gly Glu Asn Leu Thr Thr Lys Leu Asn Val Glu Arg Pro Leu Asp Val
 785 790 795 800
 Val Leu Thr Ser Gly Ile Pro Lys
 805

<210> 4818

<211> 602

<212> PRT

<213> Homo sapiens

<400> 4818

Met Ile Gln Ser Gly Lys Gly Ala Asp Pro Pro Asp Lys Lys Asp Met
 1 5 10 15
 Lys Leu Ser Thr Ala Thr Asn Pro Gln Asn Gly Leu Ser Gln Ile Leu
 20 25 30
 Arg Leu Val Leu Gln Glu Leu Ser Leu Phe Tyr Ser Arg Asp Val Asn
 35 40 45

Gly Val Cys Leu Leu Tyr Asp Leu Leu His Ser Pro Trp Leu Gln Ala
 50 55 60
 Leu Leu Lys Ile Tyr Asp Cys Leu Gln Glu Phe Lys Glu Lys Lys Leu
 65 70 75 80
 Val Pro Ala Thr Pro His Ala Gln Val Leu Ser Tyr Glu Val Val Glu
 85 90 95
 Leu Leu Arg Glu Thr Pro Thr Ser Pro Glu Ile Gln Glu Leu Arg Gln
 100 105 110
 Met Leu Gln Ala Pro His Phe Lys Gly Ala Thr Ile Lys Arg His Glu
 115 120 125
 Met Thr Gly Asp Ile Leu Val Ala Arg Ile Ile His Gly Gly Leu Ala
 130 135 140
 Glu Arg Ser Gly Leu Leu Tyr Ala Gly Asp Lys Leu Val Glu Val Asn
 145 150 155 160
 Gly Val Ser Val Glu Gly Leu Asp Pro Glu Gln Val Ile His Ile Leu
 165 170 175
 Ala Met Ser Arg Gly Thr Ile Met Phe Lys Val Val Pro Val Ser Asp
 180 185 190
 Pro Pro Val Asn Ser Gln Gln Met Val Tyr Val Arg Ala Met Thr Glu
 195 200 205
 Tyr Trp Pro Gln Glu Asp Pro Asp Ile Pro Cys Met Asp Ala Gly Leu
 210 215 220
 Pro Phe Gln Lys Gly Asp Ile Leu Gln Ile Val Asp Gln Asn Asp Ala
 225 230 235 240
 Leu Trp Trp Gln Ala Arg Lys Ile Ser Asp Pro Ala Thr Cys Ala Gly
 245 250 255
 Leu Val Pro Ser Asn His Leu Leu Lys Arg Trp Ser Phe Ala Leu Val
 260 265 270
 Ala Gln Ala Gly Val Gln Trp His Tyr Leu Asp Ser Leu Gln Pro Leu
 275 280 285
 Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Arg Ser Trp
 290 295 300
 Asp Tyr Ile Glu Asp Asp Met Lys Ile Asp Glu Lys Cys Val Glu Ala
 305 310 315 320
 Asp Glu Glu Thr Phe Glu Ser Asp Lys Glu Glu Phe Val Gly Tyr Gly
 325 330 335

Gln Lys Phe Phe Ile Ala Gly Phe Arg Arg Ser Met Arg Leu Cys Arg
 340 345 350
 Arg Lys Ser His Leu Ser Pro Leu His Ala Ser Val Cys Cys Thr Gly
 355 360 365
 Ser Cys Tyr Ser Ala Val Gly Ala Pro Tyr Glu Glu Val Val Arg Tyr
 370 375 380
 Gln Arg Arg Pro Ser Asp Lys Tyr Arg Leu Ile Val Leu Met Gly Pro
 385 390 395 400
 Ser Gly Val Gly Val Asn Glu Leu Arg Arg Gln Leu Ile Glu Phe Asn
 405 410 415
 Pro Ser His Phe Gln Ser Ala Val Pro His Thr Thr Arg Thr Lys Lys
 420 425 430
 Ser Tyr Glu Met Asn Gly Arg Glu Tyr His Tyr Val Ser Lys Glu Thr
 435 440 445
 Phe Glu Asn Leu Ile Tyr Ser His Arg Met Leu Glu Tyr Gly Glu Tyr
 450 455 460
 Lys Gly His Leu Tyr Gly Thr Ser Val Asp Ala Val Gln Thr Val Leu
 465 470 475 480
 Val Glu Gly Lys Ile Cys Val Met Asp Leu Glu Pro Gln Asp Ile Gln
 485 490 495
 Gly Val Arg Thr His Glu Leu Lys Pro Tyr Val Ile Phe Ile Lys Pro
 500 505 510
 Ser Asn Met Arg Cys Met Lys Gln Ser Arg Lys Asn Ala Lys Val Ile
 515 520 525
 Thr Asp Tyr Tyr Val Asp Met Lys Phe Lys Asp Glu Asp Leu Gln Glu
 530 535 540
 Met Glu Asn Leu Ala Gln Arg Met Glu Thr Gln Phe Gly Gln Phe Phe
 545 550 555 560
 Asp His Val Ile Val Asn Asp Ser Leu His Asp Ala Cys Ala Gln Leu
 565 570 575
 Leu Ser Ala Ile Gln Lys Ala Gln Glu Glu Pro Gln Trp Val Pro Ala
 580 585 590
 Thr Trp Ile Ser Ser Asp Thr Glu Ser Gln
 595 600

<210> 4819

<211> 498

<212> PRT

<213> Homo sapiens

<400> 4819

Met Glu Ser Pro Arg Gly Trp Thr Leu Gln Val Ala Pro Glu Glu Gly

1

5

10

15

Gln Val Leu Cys Asn Val Lys Thr Ala Thr Arg Gly Leu Ser Glu Gly

20

25

30

Ala Val Ser Gly Gly Trp Gly Ala Trp Glu Asn Ser Thr Glu Val Pro

35

40

45

Arg Glu Ala Gly Asp Gly Gln Arg Gln Gln Ala Thr Leu Gly Ala Ala

50

55

60

Asp Glu Gln Gly Gly Pro Gly Arg Glu Leu Gly Pro Ala Asp Gly Gly

65

70

75

80

Arg Asp Gly Ala Gly Pro Arg Ser Glu Pro Ala Asp Arg Ala Leu Arg

85

90

95

Pro Ser Pro Leu Pro Glu Glu Pro Gly Cys Arg Cys Gly Glu Cys Gly

100

105

110

Lys Ala Phe Ser Gln Gly Ser Tyr Leu Leu Gln His Arg Arg Val His

115

120

125

Thr Gly Glu Lys Pro Tyr Thr Cys Pro Glu Cys Gly Lys Ala Phe Ala

130

135

140

Trp Ser Ser Asn Leu Ser Gln His Gln Arg Ile His Ser Gly Glu Lys

145

150

155

160

Pro Tyr Ala Cys Arg Glu Cys Gly Lys Ala Phe Arg Ala Gln Ser Gln

165

170

175

Leu Ile His His Gln Glu Thr His Ser Gly Leu Lys Pro Phe Arg Cys

180

185

190

Pro Asp Cys Gly Lys Ser Phe Gly Arg Ser Thr Thr Leu Val Gln His

195

200

205

Arg Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Gly

210

215

220

Lys Ala Phe Ser Trp Asn Ser Asn Phe Leu Glu His Arg Arg Val His

225 230 235 240
 Thr Gly Ala Arg Pro His Ala Cys Arg Asp Cys Gly Lys Ala Phe Ser
 245 250 255
 Gln Ser Ser Asn Leu Ala Glu His Leu Lys Ile His Ala Gly Ala Arg
 260 265 270
 Pro His Ala Cys Pro Asp Cys Gly Lys Ala Phe Val Arg Val Ala Gly
 275 280 285
 Leu Arg Gln His Arg Arg Thr His Ser Ser Glu Lys Pro Phe Pro Cys
 290 295 300
 Ala Glu Cys Gly Lys Ala Phe Arg Glu Ser Ser Gln Leu Leu Gln His
 305 310 315 320
 Gln Arg Thr His Thr Gly Glu Arg Pro Phe Glu Cys Ala Glu Cys Gly
 325 330 335
 Gln Ala Phe Val Met Gly Ser Tyr Leu Ala Glu His Arg Arg Val His
 340 345 350
 Thr Gly Glu Lys Pro His Ala Cys Ala Gln Cys Gly Lys Ala Phe Ser
 355 360 365
 Gln Arg Ser Asn Leu Leu Ser His Arg Arg Thr His Ser Gly Ala Lys
 370 375 380
 Pro Phe Ala Cys Ala Asp Cys Gly Lys Ala Phe Arg Gly Ser Ser Gly
 385 390 395 400
 Leu Ala His His Arg Leu Ser His Thr Gly Glu Arg Pro Phe Ala Cys
 405 410 415
 Ala Glu Cys Gly Lys Ala Phe Arg Gly Ser Ser Glu Leu Arg Gln His
 420 425 430
 Gln Arg Leu His Ser Gly Glu Arg Pro Phe Val Cys Ala His Cys Ser
 435 440 445
 Lys Ala Phe Val Arg Lys Ser Glu Leu Leu Ser His Arg Arg Thr His
 450 455 460
 Thr Gly Glu Arg Pro Tyr Ala Cys Gly Glu Cys Gly Lys Pro Phe Ser
 465 470 475 480
 His Arg Cys Asn Leu Asn Glu His Gln Lys Arg His Gly Gly Arg Ala
 485 490 495
 Ala Pro

<210> 4820

<211> 486

<212> PRT

<213> Homo sapiens

<400> 443

```

Met Arg Gly Arg Gly Ser Gln Gln Gln Gln Pro Thr Arg Arg Gln Gly
 1             5             10             15
Gln Lys Leu Pro Ser Pro Ser Pro Ala Gly Lys Tyr Glu Ser Ala Gln
      20             25             30
Pro Gly Gly Thr Gln Pro Glu Pro Gly Leu Gly Ala Arg Met Ala Ile
      35             40             45
His Lys Ala Leu Val Met Cys Leu Gly Leu Pro Leu Phe Leu Phe Pro
      50             55             60
Gly Ala Trp Ala Gln Gly His Val Pro Pro Gly Cys Ser Gln Gly Leu
      65             70             75             80
Asn Pro Leu Tyr Tyr Asn Leu Cys Asp Arg Ser Gly Ala Trp Gly Ile
      85             90             95
Val Leu Glu Ala Val Ala Gly Ala Gly Ile Val Thr Thr Phe Val Leu
      100            105            110
Thr Ile Ile Leu Val Ala Ser Leu Pro Phe Val Gln Asp Thr Lys Lys
      115            120            125
Arg Ser Leu Leu Gly Thr Gln Val Phe Phe Leu Leu Gly Thr Leu Gly
      130            135            140
Leu Phe Cys Leu Val Phe Ala Cys Val Val Lys Pro Asp Phe Ser Thr
      145            150            155            160
Cys Ala Ser Arg Arg Phe Leu Phe Gly Val Leu Phe Ala Ile Cys Phe
      165            170            175
Ser Cys Leu Ala Ala His Val Phe Ala Leu Asn Phe Leu Ala Arg Lys
      180            185            190
Asn His Gly Pro Arg Gly Trp Val Ile Phe Thr Val Ala Leu Leu Leu
      195            200            205
Thr Leu Val Glu Val Ile Ile Asn Thr Glu Trp Leu Ile Ile Thr Leu
      210            215            220

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<210> 4821

<211> 301

<212> PRT

<213> Homo sapiens

<400> 444

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Met Tyr Thr Arg Arg Tyr Ser Ser Ile Ser Ser Thr Ile Met Asp Val
  1              5              10              15
Asp Ser Thr Ile Ser Ser Gly Arg Ser Thr Pro Ala Met Met Asn Gly
      20              25              30
Gln Gly Ser Thr Thr Ser Ser Ser Lys Asn Ile Ala Tyr Asn Cys Cys
      35              40              45
Trp Asp Gln Cys Gln Ala Cys Phe Asn Ser Ser Pro Asp Leu Ala Asp
      50              55              60
His Ile Arg Ser Ile His Val Asp Gly Gln Arg Gly Gly Val Phe Val
      65              70              75              80
Cys Leu Trp Lys Gly Cys Lys Val Tyr Asn Thr Pro Ser Thr Ser Gln
      85              90              95
Ser Trp Leu Gln Arg His Met Leu Thr His Ser Gly Asp Lys Pro Phe
      100             105             110
Lys Cys Val Val Gly Gly Cys Asn Ala Ser Phe Ala Ser Gln Gly Gly
      115             120             125
Leu Ala Arg His Val Pro Thr His Phe Ser Gln Gln Asn Ser Ser Lys
      130             135             140
Val Ser Ser Gln Pro Lys Ala Lys Glu Glu Ser Pro Ser Lys Ala Gly
      145             150             155             160
Met Asn Lys Arg Arg Lys Leu Lys Asn Lys Arg Arg Arg Ser Leu Pro
      165             170             175
Arg Pro His Asp Phe Phe Asp Ala Gln Thr Leu Asp Ala Ile Arg His
      180             185             190
Arg Ala Ile Cys Phe Asn Leu Ser Ala His Ile Glu Ser Leu Gly Lys
      195             200             205
Gly His Ser Val Val Phe His Ser Thr Val Ile Ala Lys Arg Lys Glu
      210             215             220
Asp Ser Gly Lys Ile Lys Leu Leu Leu His Trp Met Pro Glu Asp Ile
      225             230             235             240

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Leu	Pro	Asp	Val	Trp	Val	Asn	Glu	Ser	Glu	Arg	His	Gln	Leu	Lys	Thr
				245				250				255			
Lys	Val	Val	His	Leu	Ser	Lys	Leu	Pro	Lys	Asp	Thr	Ala	Leu	Leu	Leu
				260				265				270			
Asp	Pro	Asn	Ile	Tyr	Arg	Thr	Met	Pro	Gln	Lys	Arg	Leu	Lys	Arg	Thr
				275				280				285			
Leu	Ile	Arg	Lys	Val	Phe	Asn	Leu	Tyr	Leu	Ser	Lys	Gln			
				290				295				300			

<210> 4822

<211> 626

<212> PRT

<213> Homo sapiens

<400> 445

Met	Ala	Val	Ser	Gly	Phe	Thr	Leu	Gly	Thr	Cys	Ile	Leu	Leu	Leu	His
1				5					10					15	
Ile	Ser	Tyr	Val	Ala	Asn	Tyr	Pro	Asn	Gly	Lys	Val	Thr	Gln	Ser	Cys
			20					25					30		
His	Gly	Met	Ile	Pro	Glu	His	Gly	His	Ser	Pro	Gln	Ser	Val	Pro	Val
		35					40					45			
His	Asp	Ile	Tyr	Val	Ser	Gln	Met	Thr	Phe	Arg	Pro	Gly	Asp	Gln	Ile
	50					55					60				
Glu	Val	Thr	Leu	Ser	Gly	His	Pro	Phe	Lys	Gly	Phe	Leu	Leu	Glu	Ala
65					70					75				80	
Arg	Asn	Ala	Glu	Asp	Leu	Asn	Gly	Pro	Pro	Ile	Gly	Ser	Phe	Thr	Leu
			85						90					95	
Ile	Asp	Ser	Glu	Val	Ser	Gln	Leu	Leu	Thr	Cys	Glu	Asp	Ile	Gln	Gly
		100						105					110		
Ser	Ala	Val	Ser	His	Arg	Ser	Ala	Ser	Lys	Lys	Thr	Glu	Ile	Lys	Val
	115						120					125			
Tyr	Trp	Asn	Ala	Pro	Ser	Ser	Ala	Pro	Asn	His	Thr	Gln	Phe	Leu	Val
	130					135					140				
Thr	Val	Val	Glu	Lys	Tyr	Lys	Ile	Tyr	Trp	Val	Lys	Ile	Pro	Gly	Pro
145				150					155					160	

Ile Ile Ser Gln Pro Asn Ala Phe Pro Phe Thr Thr Pro Lys Ala Thr			
165	170	175	
Val Val Leu Leu Pro Thr Leu Pro Pro Val Ser His Leu Thr Lys Pro			
180	185	190	
Phe Ser Ala Ser Asp Cys Gly Asn Lys Lys Phe Cys Ile Arg Ser Pro			
195	200	205	
Leu Asn Cys Asp Pro Glu Lys Glu Ala Ser Cys Val Phe Leu Ser Phe			
210	215	220	
Thr Arg Asp Asp Gln Ser Val Met Val Glu Met Ser Gly Pro Ser Lys			
225	230	235	240
Gly Tyr Leu Ser Phe Ala Leu Ser His Asp Gln Trp Met Gly Asp Asp			
245	250	255	
Asp Ala Tyr Leu Cys Ile His Glu Asp Gln Thr Val Tyr Ile Gln Pro			
260	265	270	
Ser His Leu Thr Gly Arg Ser His Pro Val Met Asp Ser Arg Asp Thr			
275	280	285	
Leu Glu Asp Met Ala Trp Arg Leu Ala Asp Gly Val Met Gln Cys Ser			
290	295	300	
Phe Arg Arg Asn Ile Thr Leu Pro Gly Val Lys Asn Arg Phe Asp Leu			
305	310	315	320
Asn Thr Ser Tyr Tyr Ile Phe Leu Ala Asp Gly Ala Ala Asn Asp Gly			
325	330	335	
Arg Ile Tyr Lys His Ser Gln Gln Pro Leu Ile Thr Tyr Glu Lys Tyr			
340	345	350	
Asp Val Thr Asp Ser Pro Lys Asn Ile Gly Gly Ser His Ser Val Leu			
355	360	365	
Leu Leu Lys Val His Gly Ala Leu Met Phe Val Ala Trp Met Thr Thr			
370	375	380	
Val Ser Ile Gly Val Leu Val Ala Arg Phe Phe Lys Pro Val Trp Ser			
385	390	395	400
Lys Ala Phe Leu Leu Gly Glu Ala Ala Trp Phe Gln Val His Arg Met			
405	410	415	
Leu Met Phe Thr Thr Thr Val Leu Thr Cys Ile Ala Phe Val Met Pro			
420	425	430	
Phe Ile Tyr Arg Gly Gly Trp Ser Arg His Ala Gly Tyr His Pro Tyr			
435	440	445	

Leu Gly Cys Ile Val Met Thr Leu Ala Val Leu Gln Pro Leu Leu Ala
 450 455 460
 Val Phe Arg Pro Pro Leu His Asp Pro Arg Arg Gln Met Phe Asn Trp
 465 470 475 480
 Thr His Trp Ser Met Gly Thr Ala Ala Arg Ile Ile Ala Val Ala Ala
 485 490 495
 Met Phe Leu Gly Met Asp Leu Pro Gly Leu Asn Leu Pro Asp Ser Trp
 500 505 510
 Lys Thr Tyr Ala Met Thr Gly Phe Val Ala Trp His Val Gly Thr Glu
 515 520 525
 Val Val Leu Glu Leu Lys Tyr Trp Met Met Thr Glu Phe Arg Ser Phe
 530 535 540
 Ser His Leu Leu Gln Trp Lys Gln Arg Val Met Leu Leu Lys Arg Gln
 545 550 555 560
 Cys Trp Gln Phe Met Ser Val Gly Met Leu Leu Phe Ser Ser Tyr Phe
 565 570 575
 Tyr Leu Gln Ser Thr Ile Tyr Glu Gln Ala Lys Thr Leu Ala Phe Ala
 580 585 590
 Gly Gln Val Ile Ile Ile Ile Lys Pro Lys Lys Leu Glu Ala Cys Pro
 595 600 605
 Asp Cys Leu Glu His Ile Cys Glu Phe Ser Leu Gly Arg Leu Gly Ser
 610 615 620
 Cys Leu
 625

<210> 4823

<211> 827

<212> PRT

<213> Homo sapiens

<400> 446

Met Ile Arg Arg Leu Lys Thr Glu Val Leu Thr Gln Leu Pro Pro Lys
 1 5 10 15
 Val Arg Gln Arg Ile Pro Phe Asp Leu Pro Ser Ala Ala Ala Lys Glu
 20 25 30

Leu Asn Thr Ser Phe Glu Glu Trp Glu Lys Ile Met Arg Thr Pro Asn
 35 40 45
 Ser Gly Ala Met Glu Thr Val Met Gly Leu Ile Thr Arg Met Phe Lys
 50 55 60
 Gln Thr Ala Ile Ala Lys Ala Gly Ala Val Lys Asp Tyr Ile Lys Met
 65 70 75 80
 Met Leu Gln Asn Asp Ser Leu Lys Phe Leu Val Phe Ala His His Leu
 85 90 95
 Ser Met Leu Gln Ala Cys Thr Glu Ala Val Ile Glu Asn Lys Thr Arg
 100 105 110
 Tyr Ile Arg Ile Asp Gly Ser Val Ser Ser Ser Glu Arg Ile His Leu
 115 120 125
 Val Asn Gln Phe Gln Lys Asp Pro Asp Thr Arg Val Ala Ile Leu Ser
 130 135 140
 Ile Gln Ala Ala Gly Gln Gly Leu Thr Phe Thr Ala Ala Ser His Val
 145 150 155 160
 Val Phe Ala Glu Leu Tyr Trp Asp Pro Gly His Ile Lys Gln Ala Glu
 165 170 175
 Asp Arg Ala His Arg Ile Gly Gln Cys Ser Ser Val Asn Ile His Tyr
 180 185 190
 Leu Ile Ala Asn Gly Thr Leu Asp Thr Leu Met Trp Gly Met Leu Asn
 195 200 205
 Arg Lys Ala Gln Val Thr Gly Ser Thr Leu Asn Gly Arg Lys Glu Lys
 210 215 220
 Ile Gln Ala Glu Glu Gly Asp Lys Glu Lys Trp Asp Phe Leu Gln Phe
 225 230 235 240
 Ala Glu Ala Trp Thr Pro Asn Asp Ser Ser Glu Glu Leu Arg Lys Glu
 245 250 255
 Ala Leu Phe Thr His Phe Glu Lys Glu Lys Gln His Asp Ile Arg Ser
 260 265 270
 Phe Phe Val Pro Gln Pro Lys Lys Arg Gln Leu Met Thr Ser Cys Asp
 275 280 285
 Glu Ser Lys Arg Phe Arg Glu Glu Asn Thr Val Val Ser Ser Asp Pro
 290 295 300
 Thr Lys Thr Ala Ala Arg Asp Ile Ile Asp Tyr Glu Ser Asp Val Glu
 305 310 315 320

Pro Glu Thr Lys Arg Leu Lys Leu Ala Ala Ser Glu Asp His Cys Ser
 325 330 335
 Pro Ser Glu Glu Thr Pro Ser Gln Ser Lys Gln Ile Arg Thr Pro Leu
 340 345 350
 Val Glu Ser Val Gln Glu Ala Lys Ala Gln Leu Thr Thr Pro Ala Phe
 355 360 365
 Pro Val Glu Gly Trp Gln Cys Ser Leu Cys Thr Tyr Ile Asn Asn Ser
 370 375 380
 Glu Leu Pro Tyr Cys Glu Met Cys Glu Thr Pro Gln Gly Ser Ala Val
 385 390 395 400
 Met Gln Ile Asp Ser Leu Asn His Ile Gln Asp Lys Asn Glu Lys Asp
 405 410 415
 Asp Ser Gln Lys Asp Thr Ser Lys Lys Val Gln Thr Ile Ser Asp Cys
 420 425 430
 Glu Lys Gln Ala Leu Ala Gln Ser Glu Pro Gly Gln Leu Ala Asp Ser
 435 440 445
 Lys Glu Glu Thr Pro Lys Ile Glu Lys Glu Asp Gly Leu Thr Ser Gln
 450 455 460
 Pro Gly Asn Glu Gln Trp Lys Ser Ser Asp Thr Leu Pro Val Tyr Asp
 465 470 475 480
 Thr Leu Met Phe Cys Ala Ser Arg Asn Thr Asp Arg Ile His Ile Tyr
 485 490 495
 Thr Lys Asp Gly Lys Gln Met Ser Cys Asn Phe Ile Pro Leu Asp Ile
 500 505 510
 Lys Leu Asp Leu Trp Glu Asp Leu Pro Ala Ser Phe Gln Leu Lys Gln
 515 520 525
 Tyr Arg Ser Leu Ile Leu Arg Phe Val Arg Glu Trp Ser Ser Leu Thr
 530 535 540

 Ala Met Lys Gln Arg Ile Ile Arg Lys Ser Gly Gln Leu Phe Cys Ser
 545 550 555 560
 Pro Ile Leu Ala Leu Glu Glu Ile Thr Lys Gln Gln Thr Lys Gln Asn
 565 570 575
 Cys Thr Lys Arg Tyr Ile Thr Lys Glu Asp Val Ala Val Ala Ser Met
 580 585 590
 Asp Lys Ala Lys Asn Val Gly Gly His Val Arg Leu Ile Thr Lys Glu

595	600	605
Ser Arg Pro Arg Asp Pro Phe Thr Lys Lys Leu Leu Glu Asp Gly Ala		
610	615	620
Cys Val Pro Phe Leu Asn Pro Tyr Thr Val Gln Ala Asp Leu Thr Val		
625	630	635
Lys Pro Ser Thr Ser Lys Gly Tyr Leu Gln Ala Val Asp Asn Glu Gly		
645	650	655
Asn Pro Leu Cys Leu Arg Cys Gln Gln Pro Thr Cys Gln Thr Lys Gln		
660	665	670
Ala Cys Lys Ala Asn Ser Trp Asp Ser Arg Phe Cys Ser Leu Lys Cys		
675	680	685
Gln Glu Glu Phe Trp Ile Arg Ser Asn Asn Ser Tyr Leu Arg Ala Lys		
690	695	700
Val Phe Glu Thr Glu His Gly Val Cys Gln Leu Cys Asn Val Asn Ala		
705	710	715
Gln Glu Leu Phe Leu Arg Leu Arg Asp Ala Pro Lys Ser Gln Arg Lys		
725	730	735
Asn Leu Leu Tyr Ala Thr Trp Thr Ser Lys Leu Pro Leu Glu Gln Leu		
740	745	750
Asn Glu Met Ile Arg Asn Pro Gly Glu Gly His Phe Trp Gln Val Asp		
755	760	765
His Ile Lys Pro Val Tyr Gly Gly Gly Gly Gln Cys Ser Leu Asp Asn		
770	775	780
Leu Gln Thr Leu Cys Thr Val Cys His Lys Glu Arg Thr Ala Arg Gln		
785	790	795
Ala Lys Glu Arg Ser Gln Val Arg Arg Gln Ser Leu Ala Ser Lys His		
805	810	815
Gly Ser Asp Ile Thr Arg Phe Leu Val Lys Lys		
820	825	

<210> 4824

<211> 994

<212> PRT

<213> Homo sapiens

<400> 447

Met	Ser	Gln	Trp	Thr	Pro	Glu	Tyr	Lys	Glu	Leu	Tyr	Thr	Leu	Lys	Val
1				5					10					15	
Asp	Met	Lys	Ser	Glu	Ile	Pro	Ser	Asp	Ala	Pro	Lys	Thr	Gln	Glu	Ser
			20					25					30		
Leu	Lys	Gly	Ile	Leu	Leu	His	Pro	Glu	Pro	Ile	Gly	Ala	Ala	Lys	Ser
		35					40					45			
Phe	Pro	Ala	Gly	Val	Glu	Met	Ile	Asn	Ser	Lys	Val	Gly	Asn	Glu	Phe
	50					55					60				
Ser	His	Leu	Cys	Asp	Asp	Ser	Gln	Lys	Gln	Glu	Lys	Glu	Met	Asn	Gly
65					70					75				80	
Asn	Gln	Gln	Glu	Gln	Glu	Lys	Ser	Leu	Val	Val	Arg	Lys	Lys	Arg	Lys
				85					90					95	
Ser	Gln	Gln	Ala	Gly	Pro	Ser	Tyr	Val	Gln	Asn	Cys	Val	Lys	Glu	Asn
			100					105					110		
Gln	Gly	Ile	Leu	Gly	Leu	Arg	Gln	His	Leu	Gly	Thr	Pro	Ser	Asp	Glu
		115					120					125			
Asp	Asn	Asp	Ser	Ser	Phe	Ser	Asp	Cys	Leu	Ser	Ser	Pro	Ser	Ser	Ser
	130					135						140			
Leu	His	Phe	Gly	Asp	Ser	Asp	Thr	Val	Thr	Ser	Asp	Glu	Asp	Lys	Glu
145					150					155				160	
Val	Ser	Val	Arg	His	Ser	Gln	Thr	Ile	Leu	Asn	Ala	Lys	Ser	Arg	Ser
				165					170					175	
His	Ser	Ala	Arg	Ser	His	Lys	Trp	Pro	Arg	Thr	Glu	Thr	Glu	Ser	Val
		180						185					190		
Ser	Gly	Leu	Leu	Met	Lys	Arg	Pro	Cys	Leu	His	Gly	Ser	Ser	Leu	Arg
		195				200					205				
Arg	Leu	Pro	Cys	Arg	Lys	Arg	Phe	Val	Lys	Asn	Asn	Ser	Ser	Gln	Arg
	210					215					220				
Thr	Gln	Lys	Gln	Lys	Glu	Arg	Ile	Leu	Met	Gln	Arg	Lys	Lys	Arg	Glu
225				230					235					240	
Val	Leu	Ala	Arg	Arg	Lys	Tyr	Ala	Leu	Leu	Pro	Ser	Ser	Ser	Ser	Ser
				245					250					255	
Ser	Glu	Asn	Asp	Leu	Ser	Ser	Glu	Ser	Ser	Ser	Ser	Ser	Ser	Thr	Glu
			260					265						270	

Gly Glu Glu Asp Leu Phe Val Ser Ala Ser Glu Asn His Gln Asn Asn
 275 280 285
 Pro Ala Val Pro Ser Gly Ser Ile Asp Glu Asp Val Val Val Ile Glu
 290 295 300
 Ala Ser Ser Thr Pro Gln Val Thr Ala Asn Glu Glu Ile Asn Val Thr
 305 310 315 320
 Ser Thr Asp Ser Glu Val Glu Ile Val Thr Val Gly Glu Ser Tyr Arg
 325 330 335
 Ser Arg Ser Thr Leu Gly His Ser Arg Ser His Trp Ser Gln Gly Ser
 340 345 350
 Ser Ser His Ala Ser Arg Pro Gln Glu Pro Arg Asn Arg Ser Arg Ile
 355 360 365
 Ser Thr Val Ile Gln Pro Leu Arg Gln Asn Ala Ala Glu Val Val Asp
 370 375 380
 Leu Thr Val Asp Glu Asp Glu Pro Thr Val Val Pro Thr Thr Ser Ala
 385 390 395 400
 Arg Met Glu Ser Gln Ala Thr Ser Ala Ser Ile Asn Asn Ser Asn Pro
 405 410 415
 Ser Thr Ser Glu Gln Ala Ser Asp Thr Ala Ser Ala Val Thr Ser Ser
 420 425 430
 Gln Pro Ser Thr Val Ser Glu Thr Ser Ala Thr Leu Thr Ser Asn Ser
 435 440 445
 Thr Thr Gly Thr Ser Ile Gly Asp Asp Ser Arg Arg Thr Thr Ser Ser
 450 455 460
 Ala Val Thr Glu Thr Gly Pro Pro Ala Met Pro Arg Leu Pro Ser Cys
 465 470 475 480
 Cys Pro Gln His Ser Pro Cys Gly Gly Ser Ser Gln Asn His His Ala
 485 490 495
 Leu Gly His Pro His Thr Ser Cys Phe Gln Gln His Gly His His Phe
 500 505 510
 Gln His His His His His His His Thr Pro His Pro Ala Val Pro Val
 515 520 525
 Ser Pro Ser Phe Ser Asp Pro Ala Cys Pro Val Glu Arg Pro Pro Gln
 530 535 540
 Val Gln Ala Pro Cys Gly Ala Asn Ser Ser Ser Gly Thr Ser Tyr His
 545 550 555 560

Glu Gln Gln Ala Leu Pro Val Asp Leu Ser Asn Ser Gly Ile Arg Ser
 565 570 575
 His Gly Ser Gly Ser Phe His Gly Ala Ser Ala Phe Asp Pro Cys Cys
 580 585 590
 Pro Val Ser Ser Ser Arg Ala Ala Ile Phe Gly His Gln Ala Ala Ala
 595 600 605
 Ala Ala Pro Ser Gln Pro Leu Ser Ser Ile Asp Gly Tyr Gly Ser Ser
 610 615 620
 Met Val Ala Gln Pro Gln Pro Gln Pro Pro Pro Gln Pro Ser Leu Ser
 625 630 635 640
 Ser Cys Arg His Tyr Met Pro Pro Pro Tyr Ala Ser Leu Thr Arg Pro
 645 650 655
 Leu His His Gln Ala Ser Ala Cys Pro His Ser His Gly Asn Pro Pro
 660 665 670
 Pro Gln Thr Gln Pro Pro Pro Gln Val Asp Tyr Val Ile Pro His Pro
 675 680 685
 Val His Ala Phe His Ser Gln Ile Ser Ser His Ala Thr Ser His Pro
 690 695 700
 Val Ala Pro Pro Pro Pro Thr His Leu Ala Ser Thr Ala Ala Pro Ile
 705 710 715 720
 Pro Gln His Leu Pro Pro Thr His Gln Pro Ile Ser His His Ile Pro
 725 730 735
 Ala Thr Ala Pro Pro Ala Gln Arg Leu His Pro His Glu Val Met Gln
 740 745 750
 Arg Met Glu Val Gln Arg Arg Arg Met Met Gln His Pro Thr Arg Ala
 755 760 765
 His Glu Arg Pro Pro Pro His Pro His Arg Met His Pro Asn Tyr Gly
 770 775 780
 His Gly His His Ile His Val Pro Gln Thr Met Ser Ser His Pro Arg
 785 790 795 800
 Gln Ala Pro Glu Arg Ser Ala Trp Glu Leu Gly Ile Glu Ala Gly Val
 805 810 815
 Thr Ala Ala Thr Tyr Thr Pro Gly Ala Leu His Pro His Leu Ala His
 820 825 830
 Tyr His Ala Pro Pro Arg Leu His His Leu Gln Leu Gly Ala Leu Pro
 835 840 845

Leu Met Val Pro Asp Met Ala Gly Tyr Pro His Ile Arg Tyr Ile Ser
 850 855 860
 Ser Gly Leu Asp Gly Thr Ser Phe Arg Gly Pro Phe Arg Gly Asn Phe
 865 870 875 880
 Glu Glu Leu Ile His Leu Glu Glu Arg Leu Gly Asn Val Asn Arg Gly
 885 890 895
 Ala Ser Gln Gly Thr Ile Glu Arg Cys Thr Tyr Pro His Lys Tyr Lys
 900 905 910
 Lys Val Thr Thr Asp Trp Phe Ser Gln Arg Lys Leu His Cys Lys Gln
 915 920 925
 Asp Gly Glu Glu Gly Thr Glu Glu Asp Thr Glu Glu Lys Cys Thr Ile
 930 935 940
 Cys Leu Ser Ile Leu Glu Glu Gly Glu Asp Val Arg Arg Leu Pro Cys
 945 950 955 960
 Met His Leu Phe His Gln Val Cys Val Asp Gln Trp Leu Val Thr Asn
 965 970 975
 Lys Lys Cys Pro Ile Cys Arg Val Asp Ile Glu Ala Gln Leu Pro Ser
 980 985 990
 Glu Ser

<210> 4825

<211> 105

<212> PRT

<213> Homo sapiens

<400> 448

Met Glu Gln Ser Trp Thr Glu Asn Asp Phe Asp Glu Leu Arg Glu Glu
 1 5 10 15
 Gly Phe Arg Arg Ser Asn Tyr Glu Leu Gln Glu Glu Ile Gln Ile Lys
 20 25 30
 Gly Lys Glu Val Lys Asn Phe Glu Lys Asn Leu Asp Glu Cys Ile Thr
 35 40 45
 Arg Ile Thr Asn Thr Glu Lys Cys Leu Glu Asp Leu Met Glu Leu Lys
 50 55 60

Ala Lys Ala Arg Glu Leu Cys Glu Glu Cys Arg Ser Leu Arg Ser Arg
 65 70 75 80
 Cys Asp Gln Leu Glu Glu Arg Val Ser Val Met Glu Asp Glu Met Asn
 85 90 95
 Glu Met Lys Gln Glu Gly Lys Phe Arg
 100 105

<210> 4826

<211> 136

<212> PRT

<213> Homo sapiens

<400> 449

Met Trp Leu Glu Val Arg Ala Leu Leu Leu Ser Cys Val Arg Val Phe
 1 5 10 15
 Gln His Gly Thr Asp Gly Ser Ser Gly His Ser Leu Ser Gln Gly Leu
 20 25 30
 Ala Arg Leu Arg His Asp Gly Pro Ser Pro Ala Leu Thr Thr Thr Lys
 35 40 45
 Ser Gly Arg Val Glu Phe Ala Val Asn Ser Ala Val Pro Met Glu Thr
 50 55 60
 Cys Val Val Ser Glu Gln Gln Tyr Leu Leu Glu Leu Val Gln Thr Pro
 65 70 75 80
 Arg Leu Pro Ser Gly Thr Thr Trp Ser Thr Ser Pro Arg Glu Ala Ala
 85 90 95
 Ala Leu Arg Gly Cys Pro Ala Gln Trp Pro Leu Ser Arg Val Ser Leu
 100 105 110
 Gln Glu Ala Ser Glu Gln Ser Leu Lys Pro Gly Met Ala Pro Ser Pro
 115 120 125
 Cys Cys His His Cys Val Leu Thr
 130 135

<210> 4827

<211> 250

<212> PRT

<213> Homo sapiens

<400> 450

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Met Ala Glu Gly Gly Ala Ser Lys Gly Gly Gly Glu Glu Pro Gly Lys
  1             5             10             15
Leu Pro Glu Pro Ala Glu Glu Glu Ser Gln Val Leu Arg Gly Thr Gly
             20             25             30
His Cys Lys Trp Phe Asn Val Arg Met Gly Phe Gly Phe Ile Ser Met
             35             40             45
Ile Asn Arg Glu Gly Ser Pro Leu Asp Ile Pro Val Asp Val Phe Val
             50             55             60
His Gln Ser Lys Leu Phe Met Glu Gly Phe Arg Ser Leu Lys Glu Gly
             65             70             75             80
Glu Pro Val Glu Phe Thr Phe Lys Lys Ser Ser Lys Gly Leu Glu Ser
             85             90             95
Ile Arg Val Thr Gly Pro Gly Gly Ser Pro Cys Leu Gly Ser Glu Arg
             100            105            110
Arg Pro Lys Gly Lys Thr Leu Gln Lys Arg Lys Pro Lys Gly Asp Arg
             115            120            125
Cys Tyr Asn Cys Gly Gly Leu Asp His His Ala Lys Glu Cys Ser Leu
             130            135            140
Pro Pro Gln Pro Lys Lys Cys His Tyr Cys Gln Ser Ile Met His Met
             145            150            155            160
Val Ala Asn Cys Pro His Lys Asn Val Ala Gln Pro Pro Ala Ser Ser
             165            170            175
Gln Gly Arg Gln Glu Ala Glu Ser Gln Pro Cys Thr Ser Thr Leu Pro
             180            185            190
Arg Glu Val Gly Gly Gly His Gly Cys Thr Ser Pro Pro Phe Pro Gln
             195            200            205
Glu Ala Arg Ala Glu Ile Ser Glu Arg Ser Gly Arg Ser Pro Gln Glu
             210            215            220
Ala Ser Ser Thr Lys Ser Ser Ile Ala Pro Glu Glu Gln Ser Lys Lys
             225            230            235            240
Gly Pro Ser Val Gln Lys Arg Lys Lys Thr
             245            250

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<210> 4828

<211> 748

<212> PRT

<213> Homo sapiens

<400> 451

Met Lys Gln Met His Glu Trp Asn Phe Thr Ala Ser Ser Ile Lys Gly
 1 5 10 15
 Ile Ser Leu Ser Lys Phe Asp Glu Arg Cys Cys Phe Leu Tyr Val His
 20 25 30
 Asp Asn Ser Asp Asp Phe Gln Ile Tyr Phe Ser Thr Glu Glu Gln Cys
 35 40 45
 Ser Arg Phe Phe Ser Leu Val Lys Glu Met Ile Thr Asn Thr Ala Gly
 50 55 60
 Ser Thr Val Glu Leu Glu Gly Glu Thr Asp Gly Asp Thr Leu Glu Tyr
 65 70 75 80
 Glu Tyr Asp His Asp Ala Asn Gly Glu Arg Val Val Leu Gly Lys Gly
 85 90 95
 Thr Tyr Gly Ile Val Tyr Ala Gly Arg Asp Leu Ser Asn Gln Val Arg
 100 105 110
 Ile Ala Ile Lys Glu Ile Pro Glu Arg Asp Ser Arg Tyr Ser Gln Pro
 115 120 125
 Leu His Glu Glu Ile Ala Leu His Lys Tyr Leu Lys His Arg Asn Ile
 130 135 140
 Val Gln Tyr Leu Gly Ser Val Ser Glu Asn Gly Tyr Ile Lys Ile Phe
 145 150 155 160
 Met Glu Gln Val Pro Gly Gly Ser Leu Ser Ala Leu Leu Arg Ser Lys
 165 170 175
 Trp Gly Pro Met Lys Glu Pro Thr Ile Lys Phe Tyr Thr Lys Gln Ile
 180 185 190
 Leu Glu Gly Leu Lys Tyr Leu His Glu Asn Gln Ile Val His Arg Asp
 195 200 205
 Ile Lys Gly Asp Asn Val Leu Val Asn Thr Tyr Ser Gly Val Val Lys
 210 215 220

Ile	Ser	Asp	Phe	Gly	Thr	Ser	Lys	Arg	Leu	Ala	Gly	Val	Asn	Pro	Cys
225					230					235					240
Thr	Glu	Thr	Phe	Thr	Gly	Thr	Leu	Gln	Tyr	Met	Ala	Pro	Glu	Ile	Ile
				245					250					255	
Asp	Gln	Gly	Pro	Arg	Gly	Tyr	Gly	Ala	Pro	Ala	Asp	Ile	Trp	Ser	Leu
			260					265				270			
Gly	Cys	Thr	Ile	Ile	Glu	Met	Ala	Thr	Ser	Lys	Pro	Pro	Phe	His	Glu
		275					280					285			
Leu	Gly	Glu	Pro	Gln	Ala	Ala	Met	Phe	Lys	Val	Gly	Met	Phe	Lys	Ile
	290					295					300				
His	Pro	Glu	Ile	Pro	Glu	Ala	Leu	Ser	Ala	Glu	Ala	Arg	Ala	Phe	Ile
305					310					315					320
Leu	Ser	Cys	Phe	Glu	Pro	Asp	Pro	His	Lys	Arg	Ala	Thr	Thr	Ala	Glu
			325						330					335	
Leu	Leu	Arg	Glu	Gly	Phe	Leu	Arg	Gln	Val	Asn	Lys	Gly	Lys	Lys	Asn
		340						345					350		
Arg	Ile	Ala	Phe	Lys	Pro	Ser	Glu	Gly	Pro	Arg	Gly	Val	Val	Leu	Ala
		355					360					365			
Leu	Pro	Thr	Gln	Gly	Glu	Pro	Met	Ala	Thr	Ser	Ser	Ser	Glu	His	Gly
	370						375					380			
Ser	Val	Ser	Pro	Asp	Ser	Asp	Ala	Gln	Pro	Asp	Ala	Leu	Phe	Glu	Arg
385					390					395					400
Thr	Arg	Ala	Pro	Arg	His	His	Leu	Gly	His	Leu	Leu	Ser	Val	Pro	Asp
			405						410					415	
Glu	Ser	Ser	Ala	Leu	Glu	Asp	Arg	Gly	Leu	Ala	Ser	Ser	Pro	Glu	Asp
			420					425					430		
Arg	Asp	Gln	Gly	Leu	Phe	Leu	Leu	Arg	Lys	Asp	Ser	Glu	Arg	Arg	Ala
		435					440					445			
Ile	Leu	Tyr	Lys	Ile	Leu	Trp	Glu	Glu	Gln	Asn	Gln	Val	Ala	Ser	Asn
	450						455				460				
Leu	Gln	Glu	Cys	Val	Ala	Gln	Ser	Ser	Glu	Glu	Leu	His	Leu	Ser	Val
465					470					475					480
Gly	His	Ile	Lys	Gln	Ile	Ile	Gly	Ile	Leu	Arg	Asp	Phe	Ile	Arg	Ser
			485						490					495	
Pro	Glu	His	Arg	Val	Met	Ala	Thr	Thr	Ile	Ser	Lys	Leu	Lys	Val	Asp
			500						505				510		

Leu Asp Phe Asp Ser Ser Ser Ile Ser Gln Ile His Leu Val Leu Phe
 515 520 525
 Gly Phe Gln Asp Ala Val Asn Lys Ile Leu Arg Asn His Leu Ile Arg
 530 535 540
 Pro His Trp Met Phe Ala Met Asp Asn Ile Ile Arg Arg Ala Val Gln
 545 550 555 560
 Ala Ala Val Thr Ile Leu Ile Pro Glu Leu Arg Ala His Phe Glu Pro
 565 570 575
 Thr Cys Glu Thr Glu Gly Val Asp Lys Asp Met Asp Glu Ala Glu Glu
 580 585 590
 Gly Tyr Pro Pro Ala Thr Gly Pro Gly Gln Glu Ala Gln Pro His Gln
 595 600 605
 Gln His Leu Ser Leu Gln Leu Gly Glu Leu Arg Gln Glu Thr Asn Arg
 610 615 620
 Leu Leu Glu His Leu Val Glu Lys Glu Arg Glu Tyr Gln Asn Leu Leu
 625 630 635 640
 Arg Gln Thr Leu Glu Gln Lys Thr Gln Glu Leu Tyr His Leu Gln Leu
 645 650 655
 Lys Leu Lys Ser Asn Cys Ile Thr Glu Asn Pro Ala Gly Pro Tyr Gly
 660 665 670
 Gln Arg Thr Asp Lys Glu Leu Ile Asp Trp Leu Arg Leu Gln Gly Ala
 675 680 685
 Asp Ala Lys Thr Ile Glu Lys Ile Val Glu Glu Gly Tyr Thr Leu Ser
 690 695 700
 Asp Ile Leu Asn Glu Ile Thr Lys Glu Asp Leu Arg Tyr Leu Arg Leu
 705 710 715 720
 Arg Gly Gly Leu Leu Cys Arg Leu Trp Ser Ala Val Ser Gln Tyr Arg
 725 730 735
 Arg Ala Gln Glu Ala Ser Glu Thr Lys Asp Lys Ala
 740 745

<210> 4829

<211> 572

<212> PRT

<213> Homo sapiens

<400> 452

Met Cys His Phe Lys Leu Val Ala Ile Val Gly Tyr Leu Ile Arg Leu
 1 5 10 15
 Ser Ile Lys Ser Ile Gln Ile Glu Ala Asp Asn Cys Val Thr Asp Ser
 20 25 30
 Leu Thr Ile Tyr Asp Ser Leu Leu Pro Ile Arg Ser Ser Ile Leu Tyr
 35 40 45
 Arg Ile Cys Glu Pro Thr Arg Thr Leu Met Ser Phe Val Ser Thr Asn
 50 55 60
 Asn Leu Met Leu Val Thr Phe Lys Ser Pro His Ile Arg Arg Leu Ser
 65 70 75 80
 Gly Ile Arg Ala Tyr Phe Glu Val Ile Pro Glu Gln Lys Cys Glu Asn
 85 90 95
 Thr Val Leu Val Lys Asp Ile Thr Gly Phe Glu Gly Lys Ile Ser Ser
 100 105 110
 Pro Tyr Tyr Pro Ser Tyr Tyr Pro Pro Lys Cys Lys Cys Thr Trp Lys
 115 120 125
 Phe Gln Thr Ser Leu Ser Thr Leu Gly Ile Ala Leu Lys Phe Tyr Asn
 130 135 140
 Tyr Ser Ile Thr Lys Lys Ser Met Lys Gly Cys Glu His Gly Trp Trp
 145 150 155 160
 Glu Ile Asn Glu His Met Tyr Cys Gly Ser Tyr Met Asp His Gln Thr
 165 170 175
 Ile Phe Arg Val Pro Ser Pro Leu Val His Ile Gln Leu Gln Cys Ser
 180 185 190
 Ser Arg Leu Ser Asp Lys Pro Leu Leu Ala Glu Tyr Gly Ser Tyr Asn
 195 200 205
 Ile Ser Gln Pro Cys Pro Val Gly Ser Phe Arg Cys Ser Ser Gly Leu
 210 215 220
 Cys Val Pro Gln Ala Gln Arg Cys Asp Gly Val Asn Asp Cys Phe Asp
 225 230 235 240
 Glu Ser Asp Glu Leu Phe Cys Val Ser Pro Gln Pro Ala Cys Asn Thr
 245 250 255
 Ser Ser Phe Arg Gln His Gly Pro Leu Ile Cys Asp Gly Phe Arg Asp
 260 265 270

Cys Glu Asn Gly Arg Asp Glu Gln Asn Cys Thr Gln Ser Ile Pro Cys			
275	280	285	
Asn Asn Arg Thr Phe Lys Cys Gly Asn Asp Ile Cys Phe Arg Lys Gln			
290	295	300	
Asn Ala Lys Cys Asp Gly Thr Val Asp Cys Pro Asp Gly Ser Asp Glu			
305	310	315	320
Glu Gly Cys Thr Cys Ser Arg Ser Ser Ser Ala Leu His Arg Ile Ile			
	325	330	335
Gly Gly Thr Asp Thr Leu Glu Gly Gly Trp Pro Trp Gln Val Ser Leu			
	340	345	350
His Phe Val Gly Ser Ala Tyr Cys Gly Ala Ser Val Ile Ser Arg Glu			
	355	360	365
Trp Leu Leu Ser Ala Ala His Cys Phe His Gly Asn Arg Leu Ser Asp			
	370	375	380
Pro Thr Pro Trp Thr Ala His Leu Gly Met Tyr Val Gln Gly Asn Ala			
385	390	395	400
Lys Phe Val Ser Pro Val Arg Arg Ile Val Val His Glu Tyr Tyr Asn			
	405	410	415
Ser Gln Thr Phe Asp Tyr Asp Ile Ala Leu Leu Gln Leu Ser Ile Ala			
	420	425	430
Trp Pro Glu Thr Leu Lys Gln Leu Ile Gln Pro Ile Cys Ile Pro Pro			
	435	440	445
Thr Gly Gln Arg Val Arg Ser Gly Glu Lys Cys Trp Val Thr Gly Trp			
	450	455	460
Gly Arg Arg His Glu Ala Asp Asn Lys Gly Ser Leu Val Leu Gln Gln			
465	470	475	480
Ala Glu Val Glu Leu Ile Asp Gln Thr Leu Cys Val Ser Thr Tyr Gly			
	485	490	495
Ile Ile Thr Ser Arg Met Leu Cys Ala Gly Ile Met Ser Gly Lys Arg			
	500	505	510
Asp Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Ser Cys Arg Arg Lys			
	515	520	525
Ser Asp Gly Lys Trp Ile Leu Thr Gly Ile Val Ser Trp Gly His Gly			
	530	535	540
Cys Gly Arg Pro Asn Phe Pro Gly Val Tyr Thr Arg Val Ser Asn Phe			
545	550	555	560

Val Pro Trp Ile His Lys Tyr Val Pro Ser Leu Leu
 565 570

<210> 4830

<211> 134

<212> PRT

<213> Homo sapiens

<400> 453

Met Val Gly Leu Leu Phe His Ala Pro Lys Ala Pro Glu Met Ala Pro
 1 5 10 15
 Leu Arg Cys Cys Ile Met Asn Lys Ile Ile Met Val Arg Arg Pro Lys
 20 25 30
 Gln Ser Thr Ala Asp Tyr Gly Met Arg Thr Ser Gly Pro Val Glu Ser
 35 40 45
 Gly Leu Ser Ala Asp Ser Leu Gln Leu Leu Cys Ser Tyr Ala Ala Ile
 50 55 60
 Lys Asn Ser Ala Glu Leu Leu Met Val Gly Pro Gln Gly Met Arg Pro
 65 70 75 80
 Ala Thr Gly Gln Asp Leu Leu Cys Arg Pro Cys Leu Ser His Asp Leu
 85 90 95
 Pro Gly Pro Leu His Pro Pro Arg Gly Leu Ser Gly Ser Ser Ser Leu
 100 105 110
 Leu Ile Ser Pro Arg Leu Gln Asp Val Ser Leu Gln Leu Val His Pro
 115 120 125
 Thr Pro Glu Glu Ser Phe
 130

<210> 4831

<211> 184

<212> PRT

<213> Homo sapiens

<400> 454

Met Pro Phe Arg Lys Ala Cys Gly Pro Lys Leu Thr Asn Ser Pro Thr
 1 5 10 15
 Val Ile Val Met Val Gly Leu Pro Ala Arg Gly Lys Thr Tyr Ile Ser
 20 25 30
 Lys Lys Leu Thr Arg Tyr Leu Tyr Trp Ile Gly Val Pro Thr Lys Val
 35 40 45
 Phe Asn Val Gly Glu Tyr Arg Arg Glu Ala Val Lys Gln Tyr Ser Ser
 50 55 60
 Tyr Asn Phe Phe Arg Pro Asp Asn Glu Glu Ala Met Lys Val Arg Lys
 65 70 75 80
 Gln Cys Ala Leu Ala Ala Leu Arg Asp Val Lys Ser Tyr Leu Ala Lys
 85 90 95
 Glu Gly Gly Gln Ile Ala Val Phe Asp Ala Thr Asn Thr Thr Arg Glu
 100 105 110
 Arg Arg His Met Ile Leu His Phe Ala Lys Glu Asn Asp Phe Lys Ala
 115 120 125
 Phe Phe Ile Glu Ser Val Cys Asp Asp Pro Thr Val Val Ala Ser Asn
 130 135 140
 Ile Met Gln Lys Ala Phe Gln Arg Asp Leu Ser Ala Thr Pro Leu Trp
 145 150 155 160
 Cys Cys Arg Lys Leu Lys Ser Pro Ala Arg Ile Thr Lys Thr Ala Thr
 165 170 175
 Arg Gln Lys Pro Trp Thr Thr Ser
 180

<210> 4832

<211> 493

<212> PRT

<213> Homo sapiens

<400> 455

Met Gly Pro Thr Ser Val Leu Arg Ala Gly Leu Thr Pro Ser Cys Leu
 1 5 10 15
 Pro Pro Pro Ser Gly Ala Thr Asn Gly Ser Val Ser Pro Leu Gly Arg
 20 25 30

Ala	Gln	Arg	Val	Trp	Thr	Glu	Pro	Gly	Gly	Arg	Gly	Leu	His	Gly	Ala	
35						40						45				
Thr	Ala	Ala	Gly	Pro	Val	Ala	Ala	Ala	Cys	Pro	Leu	Leu	Ala	Val	Thr	
50						55						60				
Ala	Thr	Ala	Pro	Gly	Gln	Pro	Ser	Gly	Ala	Ser	Thr	Val	Trp	Val	Arg	
65						70						75			80	
Glu	Gly	Gly	Thr	Ala	Pro	Ala	Thr	Arg	Met	Thr	Val	Pro	Leu	Ala	Pro	
			85						90						95	
Arg	Thr	Ser	Glu	Lys	Cys	Ser	Val	Leu	Asn	Leu	Thr	Ala	Ser	Leu	Ser	
			100						105						110	
Val	Gly	Asn	Ser	Thr	Ser	Gly	Lys	Arg	Thr	Gly	Glu	Ala	Cys	Ser	Leu	
115						120						125				
Thr	Cys	Leu	Ala	Glu	Gly	Phe	Asn	Phe	Tyr	Thr	Glu	Arg	Ala	Ala	Ala	
130						135						140				
Val	Val	Asp	Gly	Thr	Pro	Cys	Arg	Pro	Asp	Thr	Val	Asp	Ile	Cys	Val	
145						150						155			160	
Ser	Gly	Glu	Cys	Lys	His	Val	Gly	Cys	Asp	Arg	Val	Leu	Gly	Ser	Asp	
			165						170						175	
Leu	Arg	Glu	Asp	Lys	Cys	Arg	Val	Cys	Gly	Gly	Asp	Gly	Ser	Ala	Cys	
			180						185						190	
Glu	Thr	Ile	Glu	Gly	Val	Phe	Ser	Pro	Ala	Ser	Pro	Gly	Ala	Gly	Tyr	
195						200						205				
Glu	Asp	Val	Val	Trp	Ile	Pro	Lys	Gly	Ser	Val	His	Ile	Phe	Ile	Gln	
210						215						220				
Asp	Leu	Asn	Leu	Ser	Leu	Asn	His	Leu	Ala	Leu	Lys	Gly	Asp	Gln	Glu	
225						230						235			240	
Ser	Leu	Leu	Leu	Glu	Gly	Leu	Pro	Gly	Thr	Pro	Gln	Pro	His	Arg	Leu	
			245						250						255	
Pro	Leu	Ala	Gly	Thr	Thr	Phe	Gln	Leu	Arg	Gln	Gly	Pro	Asp	Gln	Val	
260						265						270				
Gln	Ser	Leu	Glu	Ala	Leu	Gly	Pro	Ile	Asn	Ala	Ser	Leu	Ile	Val	Met	
275						280						285				
Val	Leu	Ala	Arg	Thr	Glu	Leu	Pro	Ala	Leu	Arg	Tyr	Arg	Phe	Asn	Ala	
290						295						300				
Pro	Ile	Ala	Arg	Asp	Ser	Leu	Pro	Pro	Tyr	Ser	Trp	His	Tyr	Ala	Pro	
305						310						315			320	

Trp Thr Arg Cys Ser Ala Gln Cys Ala Gly Gly Ser Gln Val Gln Ala
 325 330 335
 Val Glu Cys Arg Asn Gln Leu Asp Gly Ser Ala Val Ala Pro His Tyr
 340 345 350
 Cys Ser Ala His Ser Lys Leu Pro Lys Arg Gln Arg Ala Cys Asn Thr
 355 360 365
 Glu Pro Cys Pro Pro Asp Trp Val Val Gly Asn Trp Ser Leu Cys Ser
 370 375 380
 Arg Ser Cys Asp Ala Gly Val Arg Ser Arg Ser Val Val Cys Gln Arg
 385 390 395 400
 Arg Val Ser Ala Ala Glu Glu Lys Ala Leu Asp Asp Ser Ala Cys Pro
 405 410 415
 Gln Pro Arg Pro Pro Val Leu Glu Ala Cys His Gly Pro Thr Cys Pro
 420 425 430
 Pro Glu Trp Ala Ala Leu Asp Trp Ser Glu Cys Thr Pro Ser Cys Gly
 435 440 445
 Pro Gly Leu Arg His Arg Val Val Leu Cys Lys Ser Ala Asp His Arg
 450 455 460
 Ala Thr Leu Pro Pro Ala His Cys Ser Pro Ala Ala Lys Pro Pro Ala
 465 470 475 480
 Thr Met Arg Cys Asn Leu Arg Arg Cys Pro Pro Ala Arg
 485 490

<210> 4833

<211> 803

<212> PRT

<213> Homo sapiens

<400> 456

Met Ile Ser Ala Gln Cys Asn Leu Cys Leu Pro Gly Ser Gly Asp Ser
 1 5 10 15
 Cys Ala Ser Gly Ser Gln Leu Ala Gly Thr Thr Val Ala Gly Pro Ala
 20 25 30
 His Pro Glu Ser Leu Thr Leu Cys Ser Gly Glu Ala Glu Arg Arg Gly
 35 40 45

Lys Glu Glu Trp Pro Asp Ser His His Tyr Pro Gly Pro Thr Pro Ala
 50 55 60
 Pro Glu Ser Ser Asp Gly Pro His Lys Val Thr Val Leu Ala Thr Met
 65 70 75 80
 Leu Ser Ser Arg Trp Trp Pro Ser Ser Trp Gly Ile Leu Gly Leu Gly
 85 90 95
 Pro Arg Ser Pro Pro Arg Gly Ser Gln Leu Cys Ala Leu Tyr Ala Phe
 100 105 110
 Thr Tyr Thr Gly Ala Asp Gly Gln Gln Val Ser Leu Ala Glu Gly Asp
 115 120 125
 Arg Phe Leu Leu Leu Arg Lys Thr Asn Ser Asp Trp Trp Leu Ala Arg
 130 135 140
 Arg Leu Glu Ala Pro Ser Thr Ser Arg Pro Ile Phe Val Pro Ala Ala
 145 150 155 160
 Tyr Met Ile Glu Glu Ser Ile Pro Ser Gln Ser Pro Thr Thr Val Ile
 165 170 175
 Pro Gly Gln Leu Leu Trp Thr Pro Gly Pro Lys Leu Phe His Gly Ser
 180 185 190
 Leu Glu Glu Leu Ser Gln Ala Leu Pro Ser Arg Ala Gln Ala Ser Ser
 195 200 205
 Glu Gln Pro Pro Pro Leu Pro Arg Lys Met Cys Arg Ser Val Ser Thr
 210 215 220
 Asp Asn Leu Ser Pro Ser Leu Leu Lys Pro Phe Gln Glu Gly Pro Ser
 225 230 235 240
 Gly Arg Ser Leu Ser Gln Glu Asn Leu Pro Pro Glu Ala Ser Ala Ser
 245 250 255
 Thr Ala Gly Pro Gln Pro Leu Met Ser Glu Pro Pro Val Tyr Cys Asn
 260 265 270
 Leu Val Asp Leu Arg Arg Cys Pro Arg Ser Pro Pro Pro Gly Pro Ala
 275 280 285
 Cys Pro Leu Leu Gln Arg Pro Asp Ala Trp Glu Gln His Leu Asp Pro
 290 295 300
 Asn Ser Gly Arg Cys Phe Tyr Ile Asn Ser Leu Thr Gly Cys Lys Ser
 305 310 315 320
 Trp Lys Pro Pro Arg Arg Ser Arg Ser Glu Thr Asn Pro Gly Ser Met
 325 330 335

Glu Gly Thr Gln Thr Leu Lys Arg Asn Asn Asp Val Leu Gln Pro Gln
 340 345 350
 Ala Lys Gly Phe Arg Ser Asp Thr Gly Thr Pro Glu Pro Leu Asp Pro
 355 360 365
 Gln Gly Ser Leu Ser Leu Ser Gln Arg Thr Ser Gln Leu Asp Pro Pro
 370 375 380
 Ala Leu Gln Ala Pro Arg Pro Leu Pro Gln Leu Leu Asp Asp Pro His
 385 390 395 400
 Glu Val Glu Lys Ser Gly Leu Leu Asn Met Thr Lys Ile Ala Gln Gly
 405 410 415
 Gly Arg Lys Leu Arg Lys Asn Trp Gly Pro Ser Trp Val Val Leu Thr
 420 425 430
 Gly Asn Ser Leu Val Phe Tyr Arg Glu Pro Pro Pro Thr Ala Pro Ser
 435 440 445
 Ala Gly Trp Gly Pro Ala Gly Ser Arg Pro Glu Ser Ser Val Asp Leu
 450 455 460
 Arg Gly Ala Ala Leu Ala His Gly Arg His Leu Ser Ser Arg Arg Asn
 465 470 475 480
 Val Leu His Ile Arg Thr Ile Pro Gly His Glu Phe Leu Leu Gln Ser
 485 490 495
 Asp His Glu Thr Glu Leu Arg Ala Trp His Arg Ala Leu Arg Thr Val
 500 505 510
 Ile Glu Arg Leu Asp Arg Glu Asn Pro Leu Glu Leu Arg Leu Ser Gly
 515 520 525
 Ser Gly Pro Ala Glu Leu Ser Ala Gly Glu Asp Glu Glu Glu Glu Ser
 530 535 540
 Glu Leu Val Ser Lys Pro Leu Leu Arg Leu Ser Ser Arg Arg Ser Ser
 545 550 555 560
 Ile Arg Gly Pro Glu Gly Thr Glu Gln Asn Arg Val Arg Asn Lys Leu
 565 570 575
 Lys Arg Leu Ile Ala Lys Arg Pro Pro Leu Gln Ser Leu Gln Glu Arg
 580 585 590
 Gly Leu Leu Arg Asp Gln Val Phe Gly Cys Gln Leu Glu Ser Leu Cys
 595 600 605
 Gln Arg Glu Gly Asp Thr Val Pro Ser Phe Leu Arg Leu Cys Ile Ala
 610 615 620

Ala Val Asp Lys Arg Gly Leu Asp Val Asp Gly Ile Tyr Arg Val Ser
 625 630 635 640
 Gly Asn Leu Ala Val Val Gln Lys Leu Arg Phe Leu Val Asp Arg Glu
 645 650 655
 Arg Ala Val Thr Ser Asp Gly Arg Tyr Val Phe Pro Glu Gln Pro Gly
 660 665 670
 Gln Glu Gly Arg Leu Asp Leu Asp Ser Thr Glu Trp Asp Asp Ile His
 675 680 685
 Val Val Thr Gly Ala Leu Lys Leu Phe Leu Arg Glu Leu Pro Gln Pro
 690 695 700
 Leu Val Pro Pro Leu Leu Leu Pro His Phe Arg Ala Ala Leu Ala Leu
 705 710 715 720
 Ser Gln Ile Gln Glu Leu Ile Gly Ser Met Pro Lys Pro Asn His Asp
 725 730 735
 Thr Leu Arg Tyr Leu Leu Glu His Leu Cys Arg Val Ile Ala His Ser
 740 745 750
 Asp Lys Asn Arg Met Thr Pro His Asn Leu Gly Ile Val Phe Gly Pro
 755 760 765
 Thr Leu Phe Arg Pro Glu Gln Glu Thr Ser Asp Pro Ala Ala His Ala
 770 775 780
 Leu Tyr Pro Gly Gln Leu Val Gln Leu Met Leu Thr Asn Phe Thr Ser
 785 790 795 800
 Leu Phe Pro

<210> 4834

<211> 892

<212> PRT

<213> Homo sapiens

<400> 457

Met Gln Asp Leu Lys Lys Tyr Lys Lys Lys Lys Gln Lys Arg Met Lys
 1 5 10 15
 Ser Arg Lys Val Arg Lys Pro Thr Glu Asn Gln Glu Lys Asn Ile Arg
 20 25 30

Lys Arg Glu Arg Arg Lys Lys Ser Lys Arg Arg Lys Arg Glu Lys His
 35 40 45
 Lys His Asn Ser Pro Ser Ser Asp Asp Ser Ser Asp Tyr Ser Leu Asp
 50 55 60
 Ser Asp Val Glu His Thr Glu Ser Ser His Lys Lys Arg Thr Gly Phe
 65 70 75 80
 Tyr Arg Asp Tyr Asp Ile Pro Phe Thr Gln Arg Gly His Ile Ser Gly
 85 90 95
 Ser Tyr Ile Thr Ser Lys Lys Gly Gln His Asn Lys Lys Phe Lys Ser
 100 105 110
 Lys Glu Tyr Asp Glu Tyr Ser Thr Tyr Ser Asp Asp Asn Phe Gly Asn
 115 120 125
 Tyr Ser Asp Asp Asn Phe Gly Asn Tyr Gly Gln Glu Thr Glu Glu Asp
 130 135 140
 Phe Ala Asn Gln Leu Lys Gln Tyr Arg Gln Ala Lys Glu Thr Ser Asn
 145 150 155 160
 Ile Ala Leu Gly Ser Ser Phe Ser Lys Glu Ser Gly Lys Lys Gln Arg
 165 170 175
 Met Lys Gly Val Gln Gln Gly Ile Glu Gln Arg Val Lys Ser Phe Asn
 180 185 190
 Val Gly Arg Gly Arg Gly Leu Pro Lys Lys Ile Lys Arg Lys Glu Arg
 195 200 205
 Gly Gly Arg Thr Asn Lys Gly Pro Asn Val Phe Ser Val Ser Asp Asp
 210 215 220
 Phe Gln Glu Tyr Asn Lys Pro Gly Lys Lys Trp Lys Val Met Thr Gln
 225 230 235 240
 Glu Phe Ile Asn Gln His Thr Val Glu His Lys Gly Lys Gln Ile Cys
 245 250 255
 Lys Tyr Phe Leu Glu Gly Arg Cys Ile Lys Gly Asp Gln Cys Lys Phe
 260 265 270
 Asp His Asp Ala Glu Leu Glu Lys Arg Lys Glu Ile Cys Lys Phe Tyr
 275 280 285
 Leu Gln Gly Tyr Cys Thr Lys Gly Glu Asn Cys Ile Tyr Met His Asn
 290 295 300
 Glu Phe Pro Cys Lys Phe Tyr His Ser Gly Ala Lys Cys Tyr Gln Gly
 305 310 315 320

Asp Asn Cys Lys Phe Ser His Asp Asp Leu Thr Lys Glu Thr Lys Lys
 325 330 335
 Leu Leu Asp Lys Val Leu Asn Thr Asp Glu Glu Leu Ile Asn Glu Asp
 340 345 350
 Glu Arg Glu Leu Glu Glu Leu Arg Lys Arg Gly Ile Thr Pro Leu Pro
 355 360 365
 Lys Pro Pro Pro Gly Val Gly Leu Leu Pro Thr Pro Pro Glu His Phe
 370 375 380
 Pro Phe Ser Asp Pro Glu Asp Asp Phe Gln Thr Asp Phe Ser Asp Asp
 385 390 395 400
 Phe Arg Lys Ile Pro Ser Leu Phe Glu Ile Val Val Lys Pro Thr Val
 405 410 415
 Asp Leu Ala His Lys Ile Gly Arg Lys Pro Pro Ala Phe Tyr Thr Ser
 420 425 430
 Ala Ser Pro Pro Gly Pro Gln Phe Gln Gly Ser Ser Pro His Pro Gln
 435 440 445
 His Ile Tyr Ser Ser Gly Ser Ser Pro Gly Pro Gly Pro Asn Met Ser
 450 455 460
 Gln Gly His Ser Ser Pro Val Met His Pro Gly Ser Pro Gly His His
 465 470 475 480
 Pro Cys Ala Gly Pro Pro Gly Leu Pro Val Pro Gln Ser Pro Pro Leu
 485 490 495
 Pro Pro Gly Pro Pro Glu Ile Val Gly Pro Gln Asn Gln Ala Gly Val
 500 505 510
 Leu Val Gln Pro Asp Thr Ser Leu Thr Pro Pro Ser Met Gly Gly Ala
 515 520 525
 Tyr His Ser Pro Gly Phe Pro Gly His Val Met Lys Val Pro Arg Glu
 530 535 540
 Asn His Cys Ser Pro Gly Ser Ser Tyr Gln Gln Ser Pro Gly Glu Met
 545 550 555 560
 Gln Leu Asn Thr Asn Tyr Glu Ser Leu Gln Asn Pro Ala Glu Phe Tyr
 565 570 575
 Asp Asn Tyr Tyr Ala Gln His Ser Ile His Asn Phe Gln Pro Pro Asn
 580 585 590
 Asn Ser Gly Asp Gly Met Trp His Gly Glu Phe Ala Gln Gln Gln Pro
 595 600 605

Pro Val Val Gln Asp Ser Pro Asn His Gly Ser Gly Ser Asp Gly Ser
 610 615 620
 Ser Thr Arg Thr Gly His Gly Pro Leu Pro Val Pro Gly Leu Leu Pro
 625 630 635 640
 Ala Val Gln Arg Ala Leu Phe Val Arg Leu Thr Gln Arg Tyr Gln Glu
 645 650 655
 Asp Glu Glu Gln Thr Ser Thr Gln Pro His Arg Ala Pro Ser Lys Glu
 660 665 670
 Glu Asp Asp Thr Val Asn Trp Tyr Ser Ser Ser Glu Glu Glu Gly
 675 680 685
 Ser Ser Val Lys Ser Ile Leu Lys Thr Leu Gln Lys Gln Thr Glu Thr
 690 695 700
 Leu Arg Asn Gln Gln Gln Pro Ser Thr Glu Leu Ser Thr Pro Thr Asp
 705 710 715 720
 Pro Arg Leu Ala Lys Glu Lys Ser Lys Gly Asn Gln Val Val Asp Pro
 725 730 735
 Arg Leu Arg Thr Ile Pro Arg Gln Asp Ile Arg Lys Pro Ser Glu Ser
 740 745 750
 Ala Pro Leu Asp Leu Arg Leu Ala Trp Asp Pro Arg Lys Leu Arg Gly
 755 760 765
 Asn Gly Ser Gly His Ile Gly Ser Ser Val Gly Gly Ala Lys Phe Asp
 770 775 780
 Leu His His Ala Asn Ala Gly Thr Asn Val Lys His Lys Arg Gly Asp
 785 790 795 800
 Asp Asp Asp Glu Asp Thr Glu Arg Glu Leu Gly Glu Lys Ala Phe Leu
 805 810 815
 Ile Pro Leu Asp Ala Ser Pro Gly Ile Met Leu Gln Asp Pro Arg Ser
 820 825 830
 Gln Leu Arg Gln Phe Ser His Ile Lys Lys Asp Ile Thr Leu Thr Lys
 835 840 845
 Pro Asn Phe Ala Lys His Ile Val Trp Ala Pro Glu Asp Leu Leu Pro
 850 855 860
 Val Pro Leu Pro Lys Pro Asp Pro Val Ser Ser Ile Asn Leu Pro Leu
 865 870 875 880
 Pro Pro Leu Ile Ala Asp Gln Arg Leu Asn Arg Leu

885

890

<210> 4835

<211> 891

<212> PRT

<213> Homo sapiens

<400> 458

Met Ala Leu Thr Gln Gly Pro Leu Thr Phe Arg Asp Val Ala Ile Glu
 1 5 10 15
 Phe Ser Gln Glu Glu Trp Lys Ser Leu Asp Pro Val Gln Lys Ala Leu
 20 25 30
 Tyr Trp Asp Val Met Leu Glu Asn Tyr Arg Asn Leu Val Phe Leu Gly
 35 40 45
 Ile Leu Pro Lys Cys Met Thr Lys Glu Leu Pro Pro Ile Gly Asn Ser
 50 55 60
 Asn Thr Gly Glu Lys Cys Gln Thr Val Thr Leu Glu Arg His Glu Cys
 65 70 75 80
 Tyr Asp Val Glu Asn Phe Tyr Leu Arg Glu Ile Gln Lys Asn Leu Gln
 85 90 95
 Asp Leu Glu Phe Gln Trp Lys Asp Gly Glu Ile Asn Tyr Lys Glu Val
 100 105 110
 Pro Met Thr Tyr Lys Asn Asn Leu Asn Gly Lys Arg Gly Gln His Ser
 115 120 125
 Gln Glu Asp Val Glu Asn Lys Cys Ile Glu Asn Gln Leu Thr Leu Ser
 130 135 140
 Phe Gln Ser Arg Leu Thr Glu Leu Gln Lys Phe Gln Thr Glu Gly Lys
 145 150 155 160
 Ile Tyr Glu Cys Asn Gln Ser Glu Lys Thr Val Asn Asn Ser Ser Leu
 165 170 175
 Val Ser Pro Leu Gln Arg Ile Leu Pro Ser Val Gln Thr Asn Ile Ser
 180 185 190
 Lys Lys Tyr Glu Asn Glu Phe Leu Gln Leu Ser Leu Pro Thr Gln Leu
 195 200 205
 Glu Lys Thr His Ile Arg Glu Lys Pro Tyr Ile Cys Lys Gly Cys Gly

210	215	220	
Lys Ala Phe Arg Val Ser Ser Ser Leu Ile Asn His Gln Met Val His			
225	230	235	240
Thr Thr Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe His			
245	250	255	
Arg Gly Ser Leu Leu Thr Ile His Gln Ile Val His Thr Arg Gly Lys			
260	265	270	
Pro Tyr Gln Cys Gly Val Cys Gly Lys Ile Phe Arg Gln Asn Ser Asp			
275	280	285	
Leu Val Asn His Arg Arg Ser His Thr Gly Glu Lys Pro Tyr Lys Cys			
290	295	300	
Asn Glu Cys Gly Lys Ser Phe Ser Gln Ser Tyr Asn Leu Ala Ile His			
305	310	315	320
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly			
325	330	335	
Lys Thr Phe Lys Gln Gly Ser Cys Leu Thr Thr His Gln Ile Ile His			
340	345	350	
Thr Gly Glu Lys Pro Tyr Gln Cys Asp Ile Cys Gly Lys Val Phe Arg			
355	360	365	
Gln Asn Ser Asn Leu Val Asn His Gln Arg Ile His Thr Gly Glu Lys			
370	375	380	
Pro Tyr Lys Cys Asn Ile Cys Gly Lys Ser Phe Ser Gln Ser Ser Asn			
385	390	395	400
Leu Ala Thr His Gln Thr Val His Ser Gly Asn Lys Pro Tyr Lys Cys			
405	410	415	
Asp Glu Cys Gly Lys Thr Phe Lys Arg Ser Ser Ser Leu Thr Thr His			
420	425	430	
Gln Val Ile His Thr Gly Glu Lys Pro Tyr Thr Cys Asp Val Cys Asp			
435	440	445	
Lys Val Phe Ser Gln Arg Ser Gln Leu Ala Arg His Gln Arg Gly His			
450	455	460	
Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Ser			
465	470	475	480
Gln Thr Ser His Leu Val Gly His Arg Arg Ile His Thr Gly Glu Lys			
485	490	495	
Pro Tyr Lys Cys Asp Lys Cys Gly Lys Ala Phe Lys Gln Gly Ser Leu			

500	505	510
Leu Thr Arg His Lys Ile Ile His Thr Arg Glu Lys Arg Tyr Gln Cys		
515	520	525
Gly Glu Cys Gly Lys Val Phe Ser Glu Asn Ser Cys Leu Val Arg His		
530	535	540
Leu Arg Ile His Thr Gly Glu Gln Pro Tyr Lys Cys Asn Val Cys Gly		
545	550	555
Lys Val Phe Asn Tyr Ser Gly Asn Leu Ser Ile His Lys Arg Ile Arg		
565	570	575
Thr Gly Glu Lys Pro Phe Gln Cys Asn Glu Cys Gly Thr Val Phe Arg		
580	585	590
Asn Tyr Ser Cys Leu Ala Arg His Leu Arg Ile His Thr Gly Gln Lys		
595	600	605
Pro Tyr Lys Cys Asn Val Cys Gly Lys Val Phe Asn Asp Ser Gly Asn		
610	615	620
Leu Ser Asn His Lys Arg Ile His Thr Gly Glu Lys Pro Phe Gln Cys		
625	630	635
Asn Glu Cys Gly Lys Val Phe Ser Tyr Tyr Ser Cys Leu Ala Arg His		
645	650	655
Arg Lys Ile His Ala Gly Glu Lys Pro Tyr Lys Cys Asn Asp Cys Gly		
660	665	670
Lys Ala Tyr Thr Gln Arg Ser Ser Leu Thr Lys His Leu Ile Ile His		
675	680	685
Thr Gly Glu Lys Pro Tyr Asn Cys Asn Glu Phe Gly Gly Ala Phe Ile		
690	695	700
Gln Ser Ser Lys Leu Ala Arg Tyr His Arg Asn Pro Thr Gly Glu Lys		
705	710	715
Pro His Lys Cys Ser His Cys Gly Arg Thr Phe Ser His Ile Thr Gly		
725	730	735
Leu Thr Tyr His Gln Arg Arg His Thr Gly Glu Met Pro Tyr Lys Cys		
740	745	750
Ile Glu Cys Gly Gln Val Phe Asn Ser Thr Ser Asn Leu Ala Arg His		
755	760	765
Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly		
770	775	780
Lys Val Phe Arg His Gln Ser Thr Leu Ala Arg His Arg Ser Ile His		

785 790 795 800
 Thr Gly Glu Lys Pro Tyr Val Cys Ser Glu Cys Gly Lys Ala Phe Arg
 805 810 815
 Val Arg Ser Ile Leu Val Asn His Gln Lys Met His Thr Gly Asp Lys
 820 825 830
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ile Glu Arg Ser Lys
 835 840 845
 Leu Val Tyr His Gln Arg Asn His Thr Gly Glu Lys Pro Tyr Lys Cys
 850 855 860
 Ile Glu Cys Gly Lys Ala Phe Gly Arg Phe Ser Cys Leu Asn Lys His
 865 870 875 880
 Gln Met Ile His Ser Gly Glu Lys Pro Tyr Lys
 885 890

<210> 4836

<211> 374

<212> PRT

<213> Homo sapiens

<400> 459

Met Ile Glu Tyr Gln Ile Pro Val Ser Phe Lys Asp Val Val Val Gly
 1 5 10 15
 Phe Thr Gln Glu Glu Trp His Arg Leu Ser Pro Ala Gln Arg Ala Leu
 20 25 30
 Tyr Arg Asp Val Met Leu Glu Thr Tyr Ser Asn Leu Ala Ser Val Gly
 35 40 45
 Tyr Glu Gly Thr Lys Pro Asp Val Ile Leu Arg Leu Glu Gln Glu Glu
 50 55 60
 Ala Pro Trp Ile Gly Glu Ala Ala Cys Pro Gly Cys His Cys Trp Glu
 65 70 75 80
 Asp Ile Trp Arg Val Asn Ile Gln Arg Lys Arg Arg Gln Asp Met Leu
 85 90 95
 Leu Arg Pro Gly Ala Ala Ile Ser Lys Lys Thr Leu Pro Lys Glu Lys
 100 105 110
 Ser Cys Glu Tyr Asn Lys Phe Gly Lys Ile Ser Leu Leu.Ser Thr Asp

115	120	125
Leu Phe Ser Ser Ile Gln Ser Pro Ser Asn Trp Asn Pro Cys Gly Lys		
130	135	140
Asn Leu Asn His Asn Leu Asp Leu Ile Gly Phe Lys Arg Asn Cys Ala		
145	150	155
Lys Lys Gln Asp Glu Cys Tyr Ala Tyr Gly Lys Leu Leu Gln Arg Ile		
165	170	175
Asn His Gly Arg Arg Pro Asn Gly Glu Lys Pro Arg Gly Cys Ser His		
180	185	190
Cys Glu Lys Ala Phe Thr Gln Asn Pro Ala Leu Met Tyr Lys Pro Ala		
195	200	205
Val Ser Asp Ser Leu Leu Tyr Lys Arg Lys Arg Val Pro Pro Thr Glu		
210	215	220
Lys Pro His Val Cys Ser Glu Cys Gly Lys Ala Phe Cys Tyr Lys Ser		
225	230	235
Glu Phe Ile Arg His Gln Arg Ser His Thr Gly Glu Lys Pro Tyr Gly		
245	250	255
Cys Thr Asp Cys Gly Lys Ala Phe Ser His Lys Ser Thr Leu Ile Lys		
260	265	270
His Gln Arg Ile His Thr Gly Val Arg Pro Phe Glu Cys Phe Phe Cys		
275	280	285
Gly Lys Ala Phe Thr Gln Lys Ser His Arg Thr Glu His Gln Arg Thr		
290	295	300
His Thr Gly Glu Arg Pro Phe Val Cys Ser Glu Cys Gly Lys Ser Phe		
305	310	315
Gly Glu Lys Ser Tyr Leu Asn Val His Arg Lys Met His Thr Gly Glu		
325	330	335
Arg Pro Tyr Arg Cys Arg Glu Cys Gly Lys Ser Phe Ser Gln Lys Ser		
340	345	350
Cys Leu Asn Lys His Trp Arg Thr His Phe Gly Glu Ser Ser Leu Arg		
355	360	365
Ser Lys Ser Ser Asn Thr		
370		

<211> 896

<212> PRT

<213> Homo sapiens

<400> 460

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Met Thr Glu Glu Ser Glu Glu Thr Val Leu Tyr Ile Glu His Arg Tyr
  1              5              10              15
Val Cys Ser Glu Cys Asn Gln Leu Tyr Gly Ser Leu Glu Glu Val Leu
      20              25              30
Met His Gln Asn Ser His Val Pro Gln Gln His Phe Glu Leu Val Gly
      35              40              45
Val Ala Asp Pro Gly Val Thr Val Ala Thr Asp Thr Ala Ser Gly Thr
      50              55              60
Gly Leu Tyr Gln Thr Leu Val Gln Glu Ser Gln Tyr Gln Cys Leu Glu
      65              70              75              80
Cys Gly Gln Leu Leu Met Ser Pro Ser Gln Leu Leu Glu His Gln Glu
      85              90              95
Leu His Leu Lys Met Met Ala Pro Gln Glu Ala Val Pro Ala Glu Pro
      100             105             110
Ser Pro Lys Ala Pro Pro Leu Ser Ser Ser Thr Ile His Tyr Glu Cys
      115             120             125
Val Asp Cys Lys Ala Leu Phe Ala Ser Gln Glu Leu Trp Leu Asn His
      130             135             140
Arg Gln Thr His Leu Arg Ala Thr Pro Thr Lys Ala Pro Ala Pro Val
      145             150             155             160
Val Leu Gly Ser Pro Val Val Leu Gly Pro Pro Val Gly Gln Ala Arg
      165             170             175
Val Ala Val Glu His Ser Tyr Arg Lys Ala Glu Glu Gly Gly Glu Gly
      180             185             190
Ala Thr Val Pro Ser Ala Ala Ala Thr Thr Thr Glu Val Val Thr Glu
      195             200             205
Val Glu Leu Leu Leu Tyr Lys Cys Ser Glu Cys Ser Gln Leu Phe Gln
      210             215             220
Leu Pro Ala Asp Phe Leu Glu His Gln Ala Thr His Phe Pro Ala Pro
      225             230             235             240
Val Pro Glu Ser Gln Glu Pro Ala Leu Gln Gln Glu Val Gln Ala Ser

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	245		250		255
Ser	Pro	Ala	Glu	Val	Pro
Val	Ser	Gln	Pro	Asp	Pro
Leu	Pro	Ala	Ser		
	260		265		270
Asp	His	Ser	Tyr	Glu	Leu
Arg	Asn	Gly	Glu	Ala	Ile
Gly	Arg	Asp	Arg		
	275		280		285
Arg	Gly	Arg	Arg	Ala	Arg
Arg	Asn	Asn	Ser	Gly	Glu
Ala	Gly	Gly	Ala		
	290		295		300
Ala	Thr	Gln	Glu	Leu	Phe
Cys	Ser	Ala	Cys	Asp	Gln
Leu	Phe	Leu	Ser		
	305		310		315
Pro	His	Gln	Leu	Gln	Gln
His	Leu	Arg	Ser	His	Arg
Glu	Gly	Val	Phe		
	325		330		335
Lys	Cys	Pro	Leu	Cys	Ser
Arg	Val	Phe	Pro	Ser	Pro
Ser	Ser	Ser	Leu	Asp	
	340		345		350
Gln	His	Leu	Gly	Asp	His
Ser	Ser	Glu	Ser	His	Phe
Leu	Cys	Val	Asp		
	355		360		365
Cys	Gly	Leu	Ala	Phe	Gly
Thr	Glu	Ala	Leu	Leu	Ala
His	Arg	Arg			
	370		375		380
Ala	His	Thr	Pro	Asn	Pro
Leu	His	Ser	Cys	Pro	Cys
Gly	Lys	Thr	Phe		
	385		390		395
Val	Asn	Leu	Thr	Lys	Phe
Leu	Tyr	His	Arg	Arg	Thr
His	Gly	Val	Gly		
	405		410		415
Gly	Val	Pro	Leu	Pro	Thr
Thr	Pro	Val	Pro	Pro	Glu
Glu	Pro	Val	Ile		
	420		425		430
Gly	Phe	Pro	Glu	Pro	Ala
Pro	Ala	Pro	Ala	Glu	Thr
Gly	Glu	Pro	Glu	Ala	Pro
	435		440		445
Glu	Pro	Pro	Val	Ser	Glu
Glu	Thr	Ser	Ala	Gly	Pro
Ala	Ala	Pro	Gly		
	450		455		460
Thr	Tyr	Arg	Cys	Leu	Leu
Cys	Ser	Arg	Glu	Phe	Gly
Lys	Ala	Leu	Gln		
	465		470		475
Leu	Thr	Arg	His	Gln	Arg
Phe	Val	His	Arg	Leu	Glu
Arg	Arg	His	Lys		
	485		490		495
Cys	Ser	Ile	Cys	Gly	Lys
Met	Phe	Lys	Lys	Lys	Ser
His	Val	Arg	Asn		
	500		505		510
Arg	Leu	Arg	Thr	His	Thr
Gly	Glu	Arg	Pro	Phe	Pro
Cys	Pro	Asp	Cys		
	515		520		525
Ser	Lys	Pro	Phe	Asn	Ser
Pro	Ala	Asn	Leu	Ala	Arg
His	Arg	Leu	Thr		

530	535	540	
His Thr Gly Glu Arg Pro Tyr Arg Cys Gly Asp Cys Gly Lys Ala Phe			
545	550	555	560
Thr Gln Ser Ser Thr Leu Arg Gln His Arg Leu Val His Ala Gln His			
	565	570	575
Phe Pro Tyr Arg Cys Gln Glu Cys Gly Val Arg Phe His Arg Pro Tyr			
	580	585	590
Arg Leu Leu Met His Arg Tyr His His Thr Gly Glu Tyr Pro Tyr Lys			
	595	600	605
Cys Arg Glu Cys Pro Arg Ser Phe Leu Leu Arg Arg Leu Leu Glu Val			
	610	615	620
His Gln Leu Val Val His Ala Gly Arg Gln Pro His Arg Cys Pro Ser			
625	630	635	640
Cys Gly Ala Ala Phe Pro Ser Ser Leu Arg Leu Arg Glu His Arg Cys			
	645	650	655
Ala Ala Ala Ala Ala Gln Ala Pro Arg Arg Phe Glu Cys Gly Thr Cys			
	660	665	670
Gly Lys Lys Val Gly Ser Ala Ala Arg Leu Gln Ala His Glu Ala Ala			
	675	680	685
His Ala Ala Ala Gly Pro Gly Glu Val Leu Ala Lys Glu Pro Pro Ala			
	690	695	700
Pro Arg Ala Pro Arg Ala Thr Arg Ala Pro Val Ala Ser Pro Ala Ala			
705	710	715	720
Leu Gly Ser Thr Ala Thr Ala Ser Pro Ala Ala Pro Ala Arg Arg Arg			
	725	730	735
Gly Leu Glu Cys Ser Glu Cys Lys Lys Leu Phe Ser Thr Glu Thr Ser			
	740	745	750
Leu Gln Val His Arg Arg Ile His Thr Gly Glu Arg Pro Tyr Pro Cys			
	755	760	765
Pro Asp Cys Gly Lys Ala Phe Arg Gln Ser Thr His Leu Lys Asp His			
	770	775	780
Arg Arg Leu His Thr Gly Glu Arg Pro Phe Ala Cys Glu Val Cys Gly			
785	790	795	800
Lys Ala Phe Ala Ile Ser Met Arg Leu Ala Glu His Arg Arg Ile His			
	805	810	815

Thr Gly Glu Arg Pro Tyr Ser Cys Pro Asp Cys Gly Lys Ser Tyr Arg
 820 825 830
 Ser Phe Ser Asn Leu Trp Lys His Arg Lys Thr His Gln Gln Gln His
 835 840 845
 Gln Ala Ala Val Arg Gln Gln Leu Ala Glu Ala Glu Ala Ala Val Gly
 850 855 860
 Leu Ala Val Met Glu Thr Ala Val Glu Ala Leu Pro Leu Val Glu Ala
 865 870 875 880
 Ile Glu Ile Tyr Pro Leu Ala Glu Ala Glu Gly Val Gln Ile Ser Gly
 885 890 895

<210> 4838

<211> 464

<212> PRT

<213> Homo sapiens

<400> 461

Met Phe Glu Asn Glu Ser Arg Lys Ile Phe Ser Glu Met Pro Glu Gly
 1 5 10 15
 Glu Ser Ala Gln His Ser Asp Gly Glu Ser Asp Phe Glu Arg Asp Ala
 20 25 30
 Gly Ile Gln Arg Leu Gln Gly His Thr Pro Gly Glu Asp His Gly Glu
 35 40 45
 Val Val Ser Gln Asp Arg Glu Val Gly Gln Leu Ile Gly Leu Gln Gly
 50 55 60
 Thr Tyr Leu Gly Glu Lys Pro Tyr Glu Cys Pro Gln Cys Gly Lys Thr
 65 70 75 80
 Phe Ser Pro Lys Ser His Leu Ile Thr His Glu Arg Thr His Thr Gly
 85 90 95
 Glu Lys Tyr Tyr Lys Cys Asp Glu Cys Gly Lys Ser Phe Ser Asp Gly
 100 105 110
 Ser Asn Phe Ser Arg His Gln Thr Thr His Thr Gly Glu Lys Pro Tyr
 115 120 125
 Lys Cys Arg Asp Cys Gly Lys Ser Phe Ser Arg Ser Ala Asn Leu Ile
 130 135 140

Thr His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Gln Cys Ala Glu
 145 150 155 160
 Cys Gly Lys Ser Phe Ser Arg Ser Pro Asn Leu Ile Ala His Gln Arg
 165 170 175
 Thr His Thr Gly Glu Lys Pro Tyr Ser Cys Pro Glu Cys Gly Lys Ser
 180 185 190
 Phe Gly Asn Arg Ser Ser Leu Asn Thr His Gln Gly Ile His Thr Gly
 195 200 205
 Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Glu Ser Phe Ser Tyr Asn
 210 215 220
 Ser Asn Leu Ile Arg His Gln Arg Ile His Thr Gly Glu Glu Pro Tyr
 225 230 235 240
 Lys Cys Thr Asp Cys Gly Gln Arg Phe Ser Gln Ser Ser Ala Leu Ile
 245 250 255
 Thr His Arg Arg Thr His Thr Gly Glu Lys Pro Tyr Gln Cys Ser Glu
 260 265 270
 Cys Gly Lys Ser Phe Ser Arg Ser Ser Asn Leu Ala Thr His Arg Arg
 275 280 285
 Thr His Met Val Glu Lys Pro Tyr Lys Cys Gly Val Cys Gly Lys Ser
 290 295 300
 Phe Ser Gln Ser Ser Ser Leu Ile Ala His Gln Gly Met His Thr Gly
 305 310 315 320
 Glu Lys Pro Tyr Glu Cys Leu Thr Cys Gly Glu Ser Phe Ser Trp Ser
 325 330 335
 Ser Asn Leu Leu Lys His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr
 340 345 350
 Lys Cys Ser Glu Cys Gly Lys Cys Phe Ser Gln Arg Ser Gln Leu Val
 355 360 365
 Val His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Leu Met
 370 375 380
 Cys Gly Lys Ser Phe Ser Arg Gly Ser Ile Leu Val Met His Gln Arg
 385 390 395 400
 Ala His Leu Gly Asp Lys Pro Tyr Arg Cys Pro Glu Cys Gly Lys Gly
 405 410 415
 Phe Ser Trp Asn Ser Val Leu Ile Ile His Gln Arg Ile His Thr Gly
 420 425 430

Glu Lys Pro Tyr Lys Cys Pro Glu Cys Gly Lys Gly Phe Ser Asn Ser
435 440 445
Ser Asn Phe Ile Thr His Gln Arg Thr His Met Lys Glu Lys Leu Tyr
450 455 460

<210> 4839
<211> 347
<212> PRT
<213> Homo sapiens

<400> 462																	
Met	Ser	Gly	Pro	Gly	Asn	Lys	Arg	Ala	Ala	Gly	Asp	Gly	Gly	Ser	Gly		
1				5					10					15			
Pro	Pro	Glu	Lys	Lys	Leu	Ser	Arg	Glu	Glu	Lys	Thr	Thr	Thr	Thr	Leu		
			20					25					30				
Ile	Glu	Pro	Ile	Arg	Leu	Gly	Gly	Ile	Ser	Ser	Thr	Glu	Glu	Met	Asp		
			35				40						45				
Leu	Lys	Val	Leu	Gln	Phe	Lys	Asn	Lys	Lys	Leu	Ala	Glu	Arg	Leu	Glu		
	50					55					60						
Gln	Arg	Gln	Ala	Cys	Glu	Asp	Glu	Leu	Arg	Glu	Arg	Ile	Glu	Lys	Leu		
65					70					75					80		
Glu	Lys	Arg	Gln	Ala	Thr	Asp	Asp	Ala	Thr	Leu	Leu	Ile	Val	Asn	Arg		
				85					90					95			
Tyr	Trp	Ala	Gln	Leu	Asp	Glu	Thr	Val	Glu	Ala	Leu	Leu	Arg	Cys	His		
			100					105					110				
Glu	Ser	Arg	Ile	Arg	Glu	Leu	Glu	Glu	Arg	Asp	Arg	Arg	Glu	Ser	Lys		
		115					120					125					
Lys	Ile	Ala	Asp	Glu	Asp	Ala	Leu	Arg	Arg	Ile	Arg	Gln	Ala	Glu	Glu		
		130				135					140						
Gln	Ile	Glu	His	Leu	Gln	Arg	Lys	Leu	Gly	Ala	Thr	Lys	Gln	Glu	Glu		
145					150					155					160		
Glu	Ala	Leu	Leu	Ser	Glu	Met	Asp	Ala	Gln	Leu	Leu	Thr	Val	Gln	Lys		
			165					170					175				
Leu	Glu	Glu	Lys	Glu	Arg	Ala	Leu	Gln	Gly	Ser	Leu	Gly	Gly	Val	Glu		
			180					185					190				

Lys Glu Leu Thr Leu Arg Ser Gln Ala Leu Glu Leu Asn Lys Arg Lys
 195 200 205
 Ala Val Glu Ala Ala Gln Leu Ala Glu Asp Leu Lys Val Gln Leu Glu
 210 215 220
 His Val Gln Thr Arg Leu Arg Glu Ile Gln Pro Cys Leu Ala Glu Ser
 225 230 235 240
 Arg Ala Ala Arg Glu Lys Glu Ser Phe Asn Leu Lys Arg Ala Gln Glu
 245 250 255
 Asp Ile Ser Arg Leu Arg Arg Lys Leu Glu Lys Gln Arg Lys Val Glu
 260 265 270
 Val Tyr Ala Asp Ala Asp Glu Ile Leu Gln Glu Glu Ile Lys Glu Tyr
 275 280 285
 Lys Ala Arg Leu Thr Cys Pro Cys Cys Asn Thr Arg Lys Lys Asp Ala
 290 295 300
 Val Leu Thr Lys Cys Phe His Val Phe Cys Phe Glu Cys Val Arg Gly
 305 310 315 320
 Arg Tyr Glu Ala Arg Gln Arg Lys Cys Pro Lys Cys Asn Ala Ala Phe
 325 330 335
 Gly Ala His Asp Phe His Arg Ile Tyr Ile Ser
 340 345

<210> 4840

<211> 997

<212> PRT

<213> Homo sapiens

<400> 463

Met Glu Ala Ser Trp Arg Gln Val Ala Gly Gly Arg Gly Arg Ser Arg
 1 5 10 15
 Gly Arg Ala Thr Ala Ala Pro Ser Gly Asn Gly Val His Leu Arg Gly
 20 25 30
 Ala Gly Gly Gly Arg Glu Lys Gly Ser Val Gly Ala Val Pro Ser Gly
 35 40 45
 Thr Ser Pro Gly Gly Val Ala Thr Thr Ala Ala Ala Gly Ser Arg His
 50 55 60

Ser Pro Ala Gly Ser Gln Ala Leu Gln Thr Thr Ala Ala Ser Glu Leu
 65 70 75 80
 Met Ser Gln Lys Lys Phe Glu Glu Ile Lys Lys Ala Asn Gln Ala Ala
 85 90 95
 Ala Arg Lys Leu Val Glu Glu Gln Phe Ser Ser Ser Ser Glu Glu Gly
 100 105 110
 Asp Glu Asp Phe Glu Gly Lys Gln Gly Lys Ile Leu Ala Asn Thr Phe
 115 120 125
 Ile Thr Tyr Thr Thr Gln Thr Asp Gly Asp Thr Arg Glu Leu Glu Arg
 130 135 140
 Thr Lys Gln Tyr Val Asn Glu Ala Phe Gln Ala Gly Ala Met Thr Cys
 145 150 155 160
 Leu Ile Cys Ile Ala Ser Val Lys Arg Asn Gln Ala Val Trp Ser Cys
 165 170 175
 Ser Gly Cys Phe Cys Ile Phe His Met Pro Cys Ile Gln Lys Trp Ala
 180 185 190
 Lys Asp Ser Gln Phe Leu Val Ser Ser Val Thr Asp Asp Asp Phe Gly
 195 200 205
 Lys Lys Asp Cys Pro Trp Pro Cys Pro Lys Cys Arg Phe Glu Tyr Lys
 210 215 220
 Arg Ser Glu Thr Pro Ser Arg Tyr Tyr Cys Tyr Cys Gly Lys Val Glu

 225 230 235 240
 Asp Pro Pro Leu Asp Pro Trp Leu Val Pro His Ser Cys Gly Gln Val
 245 250 255
 Cys Glu Arg Glu Phe Lys Pro Pro Cys Gly His Lys Cys Leu Leu Leu
 260 265 270
 Cys His Pro Gly Pro Cys Pro Pro Cys Pro Lys Met Val Thr Thr Thr
 275 280 285
 Cys Tyr Cys Lys Lys Ala Lys Pro Ile Pro Arg Arg Cys Ser Ala Lys
 290 295 300
 Glu Trp Ser Cys Gln Leu Pro Cys Gly Gln Lys Leu Leu Cys Gly Gln
 305 310 315 320
 His Lys Cys Glu Asn Pro Cys His Ala Gly Ser Cys Gln Pro Cys Pro
 325 330 335
 Arg Val Ser Arg Gln Lys Cys Val Cys Gly Lys Lys Val Ala Glu Arg

340	345	350
Ser Cys Ala Ser Pro Leu Trp His Cys Asp Gln Val Cys Gly Lys Thr		
355	360	365
Leu Pro Cys Gly Asn His Thr Cys Glu Gln Val Cys His Val Gly Ala		
370	375	380
Cys Gly Glu Cys Pro Arg Ser Gly Lys Arg Phe Cys Pro Cys Gln Lys		
385	390	395
Ser Lys Phe Ser Leu Pro Cys Thr Glu Asp Val Pro Thr Cys Gly Asp		
405	410	415
Ser Cys Asp Lys Val Leu Glu Cys Gly Ile His Arg Cys Ser Gln Arg		
420	425	430
Cys His Arg Gly Pro Cys Glu Thr Cys Arg Gln Glu Val Glu Lys His		
435	440	445
Cys Arg Cys Gly Lys His Thr Lys Arg Met Pro Cys His Lys Pro Tyr		
450	455	460
Leu Cys Glu Thr Lys Cys Val Lys Met Arg Asp Cys Gln Lys His Gln		
465	470	475
Cys Arg Arg Lys Cys Cys Pro Gly Asn Cys Pro Pro Cys Asp Gln Asn		
485	490	495
Cys Gly Arg Thr Leu Gly Cys Arg Asn His Lys Cys Pro Ser Val Cys		
500	505	510
His Arg Gly Ser Cys Tyr Pro Cys Pro Glu Thr Val Asp Val Lys Cys		
515	520	525
Asn Cys Gly Asn Thr Lys Val Thr Val Pro Cys Gly Arg Glu Arg Thr		
530	535	540
Thr Arg Pro Pro Lys Cys Lys Glu Gln Cys Ser Arg Pro Pro Thr Cys		
545	550	555
His His Thr Ser Gln Glu Lys His Arg Cys His Phe Gly Ser Cys Pro		
565	570	575
Pro Cys His Gln Pro Cys Gln Lys Val Leu Glu Lys Cys Gly His Leu		
580	585	590
Cys Pro Ala Pro Cys His Asp Gln Ala Leu Ile Lys Gln Thr Gly Arg		
595	600	605
His Gln Pro Thr Gly Pro Trp Glu Gln Pro Ser Glu Pro Ala Phe Ile		
610	615	620
Gln Thr Ala Leu Pro Cys Pro Pro Cys Gln Val Pro Ile Pro Met Glu		

625	630	635	640
Cys Leu Gly Lys His Glu Val Ser Pro Leu Pro Cys His Ala Val Gly			
	645	650	655
Pro Tyr Ser Cys Lys Arg Val Cys Gly Arg Ile Leu Asp Cys Gln Asn			
	660	665	670
His Thr Cys Met Lys Glu Cys His Lys Val Thr Lys Thr Asp Gly Cys			
	675	680	685
Thr Gly Lys Asn Lys Ala Gly Pro Glu Cys Leu His Cys Glu Glu Gly			
	690	695	700
Cys Ser Lys Ser Arg Pro Leu Gly Cys Leu His Pro Cys Ile Leu Arg			
705	710	715	720
Cys His Pro Gly Glu Cys Pro Pro Cys Val Gln Met Leu Arg Ile Lys			
	725	730	735
Cys His Cys Lys Ile Thr Ser Leu Tyr Val Glu Cys Arg Lys Ile Thr			
	740	745	750
Thr Ala Asp Val Asn Glu Lys Asn Leu Leu Ser Cys Cys Lys Asn Gln			
	755	760	765
Cys Pro Lys Glu Leu Pro Cys Gly His Arg Cys Lys Glu Met Cys His			
	770	775	780
Pro Gly Glu Cys Pro Phe Asn Cys Asn Gln Lys Val Lys Leu Arg Cys			
785	790	795	800
Pro Cys Lys Arg Ile Lys Lys Glu Leu Gln Cys Asn Lys Val Arg Glu			
	805	810	815
Asn Gln Val Ser Ile Glu Cys Asp Thr Thr Cys Lys Glu Met Lys Arg			
	820	825	830
Lys Ala Ser Glu Ile Lys Glu Ala Glu Ala Lys Ala Ala Leu Glu Glu			
	835	840	845
Glu Lys Arg Arg Gln Gln Ala Glu Leu Glu Ala Phe Glu Asn Arg Leu			
	850	855	860
Lys Thr Asn His Ile Gly His Thr Gly Tyr Leu Asn Thr Val Thr Val			
865	870	875	880
Ser Pro Asp Gly Ser Leu Cys Ala Ser Gly Gly Lys Asp Gly Gln Ala			
	885	890	895
Met Leu Trp Asp Leu Asn Glu Gly Lys His Leu Tyr Thr Leu Asp Gly			
	900	905	910
Gly Asp Ile Ile Asn Ala Leu Cys Phe Ser Pro Asn Arg Tyr Trp Leu			

915 920 925
 Cys Ala Ala Thr Gly Pro Ser Ile Lys Ile Trp Asp Leu Glu Gly Lys
 930 935 940
 Ile Ile Val Asp Glu Leu Lys Gln Glu Val Ile Ser Thr Ser Ser Lys
 945 950 955 960
 Ala Glu Pro Pro Gln Cys Thr Ser Leu Ala Trp Ser Ala Asp Gly Gln
 965 970 975
 Thr Leu Phe Ala Gly Tyr Thr Asp Asn Leu Val Arg Val Trp Gln Val
 980 985 990
 Thr Ile Gly Thr Arg
 995

<210> 4841

<211> 709

<212> PRT

<213> Homo sapiens

<400> 464

Met Lys Arg Cys Arg Ser Asp Glu Leu Gln Gln Gln Gly Glu Glu
 1 5 10 15
 Asp Gly Ala Gly Leu Glu Asp Ala Ala Ser His Leu Pro Gly Ala Asp
 20 25 30
 Leu Arg Pro Gly Glu Thr Thr Gly Ala Asn Ser Ala Gly Gly Pro Thr
 35 40 45
 Ser Asp Ala Gly Ala Ala Ala Ala Pro Asn Pro Gly Pro Arg Ser Lys
 50 55 60
 Pro Pro Asp Leu Lys Lys Ile Gln Gln Leu Ser Glu Gly Ser Met Phe
 65 70 75 80
 Gly His Gly Leu Lys His Leu Phe His Ser Arg Arg Arg Ser Arg Glu
 85 90 95
 Arg Glu His Gln Thr Ser Gln Asp Ser Gln Gln His Gln Gln Gln Gln
 100 105 110
 Gly Met Ser Asp His Asp Ser Pro Asp Glu Lys Glu Arg Ser Pro Glu
 115 120 125
 Met His Arg Val Ser Tyr Ala Met Ser Leu His Asp Leu Pro Ala Arg

130	135	140	
Pro Thr Ala Phe Asn Arg Val Leu Gln Gln Ile Arg Ser Arg Pro Ser			
145	150	155	160
Ile Lys Arg Gly Ala Ser Leu His Ser Ser Ser Gly Gly Gly Ser Ser			
	165	170	175
Gly Ser Ser Ser Arg Arg Thr Lys Ser Ser Ser Leu Glu Pro Gln Arg			
	180	185	190
Gly Ser Pro His Leu Leu Arg Lys Ala Pro Gln Asp Ser Ser Leu Ala			
	195	200	205
Ala Ile Leu His Gln His Gln Cys Arg Pro Arg Ser Ser Ser Thr Thr			
	210	215	220
Asp Thr Ala Leu Leu Leu Ala Asp Gly Ser Asn Val Tyr Leu Leu Ala			
225	230	235	240
Glu Glu Ala Glu Gly Ile Gly Asp Lys Val Asp Lys Gly Asp Leu Val			
	245	250	255
Ala Leu Ser Leu Pro Ala Gly His Gly Asp Thr Asp Gly Pro Ile Ser			
	260	265	270
Leu Asp Val Pro Asp Gly Ala Pro Asp Pro Gln Arg Thr Lys Ala Ala			
	275	280	285
Ile Asp His Leu His Gln Lys Ile Leu Lys Ile Thr Glu Gln Ile Lys			
	290	295	300
Ile Glu Gln Glu Ala Arg Asp Asp Asn Val Ala Glu Tyr Leu Lys Leu			
305	310	315	320
Ala Asn Asn Ala Asp Lys Gln Gln Val Ser Arg Ile Lys Gln Val Phe			
	325	330	335
Glu Lys Lys Asn Gln Lys Ser Ala Gln Thr Ile Ala Gln Leu His Lys			
	340	345	350
Lys Leu Glu His Tyr Arg Arg Arg Leu Lys Glu Ile Glu Gln Asn Gly			
	355	360	365
Pro Ser Arg Gln Pro Lys Asp Val Leu Arg Asp Met Gln Gln Gly Leu			
	370	375	380
Lys Asp Val Gly Ala Asn Val Arg Ala Gly Ile Ser Gly Phe Gly Gly			
385	390	395	400
Gly Val Val Glu Gly Val Lys Gly Ser Leu Ser Gly Leu Ser Gln Ala			
	405	410	415
Thr His Thr Ala Val Val Ser Lys Pro Arg Glu Phe Ala Ser Leu Ile			

420	425	430
Arg Asn Lys Phe Gly Ser Ala Asp Asn Ile Ala His Leu Lys Asp Pro		
435	440	445
Leu Glu Asp Gly Pro Pro Glu Glu Ala Ala Arg Ala Leu Ser Gly Ser		
450	455	460
Ala Thr Leu Val Ser Ser Pro Lys Tyr Gly Ser Asp Asp Glu Cys Ser		
465	470	475
Ser Ala Ser Ala Ser Ser Ala Gly Ala Gly Ser Asn Ser Gly Ala Gly		
485	490	495
Pro Gly Gly Ala Leu Gly Ser Pro Lys Ser Asn Ala Leu Tyr Gly Ala		
500	505	510
Pro Gly Asn Leu Asp Ala Leu Leu Glu Glu Leu Arg Glu Ile Lys Glu		
515	520	525
Gly Gln Ser His Leu Glu Asp Ser Met Glu Asp Leu Lys Thr Gln Leu		
530	535	540
Gln Arg Asp Tyr Thr Tyr Met Thr Gln Cys Leu Gln Glu Glu Arg Tyr		
545	550	555
Arg Tyr Glu Arg Leu Glu Glu Gln Leu Asn Asp Leu Thr Glu Leu His		
565	570	575
Gln Asn Glu Met Thr Asn Leu Lys Gln Glu Leu Ala Ser Met Glu Glu		
580	585	590
Lys Val Ala Tyr Gln Ser Tyr Glu Arg Ala Arg Asp Ile Gln Glu Ala		
595	600	605
Val Glu Ser Cys Leu Thr Arg Val Thr Lys Leu Glu Leu Gln Gln Gln		
610	615	620
Gln Gln Gln Val Val Gln Leu Glu Gly Val Glu Asn Ala Asn Ala Arg		
625	630	635
Ala Leu Leu Gly Lys Phe Ile Asn Val Ile Leu Ala Leu Met Ala Val		
645	650	655
Leu Leu Val Phe Val Ser Thr Ile Ala Asn Phe Ile Thr Pro Leu Met		
660	665	670
Lys Thr Arg Leu Arg Ile Thr Ser Thr Thr Leu Leu Val Leu Val Leu		
675	680	685
Phe Leu Leu Trp Lys His Trp Asp Ser Leu Thr Tyr Leu Leu Glu His		
690	695	700
Val Leu Leu Pro Ser		

705

<210> 4842

<211> 335

<212> PRT

<213> Homo sapiens

<400> 465

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Met Gln Arg His Val Met Val Ala Asn Pro Ser Val Leu Cys Ser His
  1              5              10              15
Phe Asn Gln Asp Leu Trp Pro Glu Gln Ser Ile Lys Asp Ser Phe Gln
      20              25              30
Lys Leu Ile Leu Arg Arg His Lys Lys Cys Gly His Asp Asn Leu Gln
      35              40              45
Leu Lys Lys Gly Cys Glu Ser Val Asp Lys Cys Lys Val His Lys Arg
      50              55              60
Gly Tyr Asn Gly Leu Asn Gln Cys Leu Thr Thr Thr Gln Ser Lys Met
      65              70              75              80
Phe Gln Cys Asp Lys His Gly Lys Val Phe His Gln Phe Ser Asn Thr
      85              90              95
Asn Arg His Lys Ile Arg His Thr Gly Lys Asn Pro Cys Lys Phe Thr
      100             105             110
Glu Cys Gly Lys Ala Phe Asn Arg Ser Ser Thr Phe Thr Thr His Lys
      115             120             125
Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Ile Glu Cys Gly Lys
      130             135             140
Ala Phe Asn Arg Ser Ser His Leu Thr Thr His Lys Ile Ile His Thr
      145             150             155             160
Gly Glu Lys Arg Tyr Lys Cys Glu Asp Cys Gly Lys Ala Phe Asn Arg
      165             170             175
Ser Ser Asn Leu Thr Thr His Lys Lys Ile His Thr Gly Glu Lys Pro
      180             185             190
Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Lys Arg Ser Ser Ile Leu
      195             200             205
Thr Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu

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210	215	220	
Glu Cys Gly Lys Val Phe Lys Tyr Leu Ser Ser Leu Ser Thr His Lys			
225	230	235	240
Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys			
	245	250	255
Ala Phe Asn Trp Ser Ser His Leu Thr Thr His Lys Arg Ile His Thr			
	260	265	270
Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Gly Phe Lys Tyr			
	275	280	285
Ser Ser Thr Leu Thr Lys His Lys Ile Ile His Thr Gly Glu Lys Pro			
	290	295	300
Tyr Lys Cys Glu Glu Cys Arg Ser Leu Arg Ser Gln Cys Asp Gln Leu			
305	310	315	320
Glu Glu Arg Val Ser Val Met Glu Asp Glu Met Asn Gly Met Lys			
	325	330	335

<210> 4843

<211> 505

<212> PRT

<213> Homo sapiens

<400> 466

Met Lys Ala Gln Arg Glu Arg Leu Gln Ile Pro Gly Leu Thr Leu Asp			
1	5	10	15
Leu Thr Pro Arg Ser Leu Ser Pro Thr Pro Ser Ser Pro Gly Ser Pro			
	20	25	30
Cys Ser Pro Leu Leu Ala Phe His Phe Trp Ser Cys Arg Thr Ser Asn			
	35	40	45
Arg Lys Ser Leu Ile Gly Asn Gly Gln Ser Pro Ala Leu Pro Arg Pro			
	50	55	60
His Ser Pro Leu Ser Ala His Ala Gly Asn Ser Pro Gln Asp Ser Pro			
	65	70	75
Arg Asn Phe Ser Pro Ser Ala Ser Ala His Phe Ser Phe Ala Arg Arg			
	85	90	95
Asn Asp Arg Thr Asp Gly Arg Arg Trp Ser Leu Ala Ser Leu Pro Ser			

100	105	110
Ser Gly Tyr Gly Thr Asn Thr Pro Ser Ser Thr Val Ser Ser Ser Cys		
115	120	125
Ser Ser Gln Glu Lys Leu His Gln Leu Pro Tyr Gln Pro Thr Pro Asp		
130	135	140
Glu Leu His Phe Leu Ser Lys His Phe Cys Thr Thr Glu Ser Ile Ala		
145	150	155
Thr Glu Asn Arg Cys Arg Asn Thr Pro Met His Pro Arg Ser Arg Ser		
165	170	175
Leu Ser Pro Gly Arg Ser Pro Ala Cys Cys Asp His Glu Ile Ile Met		
180	185	190
Met Asn His Val Tyr Lys Glu Arg Phe Pro Lys Ala Thr Ala Gln Met		
195	200	205
Glu Glu Arg Leu Lys Glu Ile Ile Thr Ser Tyr Ser Pro Asp Asn Val		
210	215	220
Leu Pro Leu Ala Asp Gly Val Leu Ser Phe Thr His His Gln Ile Ile		
225	230	235
Glu Leu Ala Arg Asp Cys Leu Asp Lys Ser His Gln Gly Leu Ile Thr		
245	250	255
Ser Arg Tyr Phe Leu Glu Leu Gln His Lys Leu Asp Lys Leu Leu Gln		
260	265	270
Glu Ala His Asp Arg Ser Glu Ser Gly Glu Leu Ala Phe Ile Lys Gln		
275	280	285
Leu Val Arg Lys Ile Leu Ile Val Ile Ala Arg Pro Ala Arg Leu Leu		
290	295	300
Glu Cys Leu Glu Phe Asp Pro Glu Glu Phe Tyr Tyr Leu Leu Glu Ala		
305	310	315
Ala Glu Gly His Ala Lys Glu Gly Gln Gly Ile Lys Thr Asp Ile Pro		
325	330	335
Arg Tyr Ile Ile Ser Gln Leu Gly Leu Asn Lys Asp Pro Leu Glu Glu		
340	345	350
Met Ala His Leu Gly Asn Tyr Asp Ser Gly Thr Ala Glu Thr Pro Glu		
355	360	365
Thr Asp Glu Ser Val Ser Ser Ser Asn Ala Ser Leu Lys Leu Arg Arg		
370	375	380
Lys Pro Arg Glu Ser Asp Phe Glu Thr Ile Lys Leu Ile Ser Asn Gly		

385 390 395 400
 Ala Tyr Gly Ala Val Tyr Phe Val Arg His Lys Glu Ser Arg Gln Arg
 405 410 415
 Phe Ala Met Lys Lys Ile Asn Lys Gln Asn Leu Ile Leu Arg Asn Gln
 420 425 430
 Ile Gln Gln Ala Phe Val Glu Arg Asp Ile Leu Thr Phe Ala Glu Asn
 435 440 445
 Pro Phe Val Val Ser Met Tyr Cys Ser Phe Glu Thr Arg Arg His Leu
 450 455 460
 Cys Met Val Met Glu Tyr Val Glu Gly Gly Asp Cys Ala Thr Leu Met
 465 470 475 480
 Lys Asn Thr Gly Pro Leu Pro Val Asp Met Ala Arg Met Tyr Phe Ala
 485 490 495

Glu Thr Val Leu Ala Leu Glu Phe Thr
 500 505

<210> 4844

<211> 408

<212> PRT

<213> Homo sapiens

<400> 467

Met Arg Glu Lys Ser Phe Gln Cys Asn Glu Ser Gly Lys Ala Phe Asn
 1 5 10 15
 Tyr Ser Ser Leu Leu Arg Lys His Gln Ile Ile His Leu Gly Glu Lys
 20 25 30
 Gln Tyr Lys Cys Asp Val Cys Gly Lys Val Phe Asn Arg Lys Arg Asn
 35 40 45
 Leu Val Cys His Arg Arg Cys His Thr Gly Glu Lys Pro Tyr Arg Cys
 50 55 60
 Asn Glu Cys Gly Lys Thr Phe Ser Gln Thr Tyr Ser Leu Thr Cys His
 65 70 75 80
 Arg Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Asp
 85 90 95

Lys Ala Phe Ser Phe Lys Ser Asn Leu Lys Arg His Arg Arg Ile His
 100 105 110
 Ala Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser
 115 120 125
 Gln Thr Ser Ser Leu Thr Cys His Arg Arg Leu His Thr Gly Glu Lys
 130 135 140
 Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Arg Lys Ser Ser
 145 150 155 160
 Leu Thr Cys His His Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys
 165 170 175
 Asn Glu Cys Gly Lys Thr Phe Ser Gln Glu Leu Thr Leu Lys Cys His
 180 185 190
 Arg Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 195 200 205
 Lys Val Phe Asn Lys Lys Ala Asn Leu Ala Arg His His Arg Leu His
 210 215 220
 Ser Gly Glu Lys Pro Tyr Lys Cys Thr Glu Cys Val Lys Thr Phe Ser
 225 230 235 240
 Arg Asn Ser Ala Leu Val Ile His Lys Ala Ile His Ile Gly Glu Lys
 245 250 255
 Arg Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser Arg Ile Ser Ala
 260 265 270
 Leu Val Ile His Thr Ala Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
 275 280 285
 Asn Glu Cys Gly Lys Gly Phe Asn Arg Lys Thr His Leu Ala Cys His
 290 295 300
 His Arg Leu His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 305 310 315 320
 Lys Val Phe Asn Arg Lys Thr His Leu Ala His His His Arg Leu His
 325 330 335
 Thr Gly Asp Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn
 340 345 350
 Gln Lys Ala His Leu Ala Arg His His Arg Leu His Thr Gly Glu Lys
 355 360 365
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Lys Ala Asn
 370 375 380

<210> 4845
<211> 596
<212> PRT
<213> Homo sapiens

Met	Leu	Pro	Ser	Gln	Ala	Gln	Gly	Leu	Leu	Trp	Trp	Val	Phe	Pro	Leu
1				5				10						15	
Phe	Pro	Ala	Ser	Ser	Leu	Ser	Tyr	Pro	Pro	Val	Ser	Tyr	Arg	Ala	Asp
			20					25					30		
Gly	Leu	Ala	Arg	Asn	Thr	Phe	Leu	Lys	Ala	Cys	Ser	Glu	Ser	Ser	Ser
			35					40					45		
Ser	Ser	Asn	Ile	Ser	Thr	Met	Leu	Val	Thr	His	Asp	Tyr	Thr	Ala	Val
		50					55					60			
Lys	Glu	Asp	Glu	Ile	Asn	Val	Tyr	Gln	Gly	Glu	Val	Val	Gln	Ile	Leu
65					70					75					80
Ala	Ser	Asn	Gln	Gln	Asn	Met	Phe	Leu	Val	Phe	Arg	Ala	Ala	Thr	Asp
				85						90				95	
Gln	Cys	Pro	Ala	Ala	Glu	Gly	Trp	Ile	Pro	Gly	Phe	Val	Leu	Gly	His
			100					105					110		
Thr	Ser	Ala	Val	Ile	Val	Glu	Asn	Pro	Asp	Gly	Thr	Leu	Lys	Lys	Ser
		115						120					125		
Thr	Ser	Trp	His	Thr	Ala	Leu	Arg	Leu	Arg	Lys	Lys	Ser	Glu	Lys	Lys
		130					135					140			
Asp	Lys	Asp	Gly	Lys	Arg	Glu	Gly	Lys	Leu	Glu	Asn	Gly	Tyr	Arg	Lys
145					150					155					160
Ser	Arg	Glu	Gly	Leu	Ser	Asn	Lys	Val	Ser	Val	Lys	Leu	Leu	Asn	Pro
				165						170				175	
Asn	Tyr	Ile	Tyr	Asp	Val	Pro	Pro	Glu	Phe	Val	Ile	Pro	Leu	Ser	Glu
			180						185					190	

Val Thr Cys Glu Thr Gly Glu Thr Val Val Leu Arg Cys Arg Val Cys			
195	200	205	
Gly Arg Pro Lys Ala Ser Ile Thr Trp Lys Gly Pro Glu His Asn Thr			
210	215	220	
Leu Asn Asn Asp Gly His Tyr Ser Ile Ser Tyr Ser Asp Leu Gly Glu			
225	230	235	240
Ala Thr Leu Lys Ile Val Gly Val Thr Thr Glu Asp Asp Gly Ile Tyr			
245	250	255	
Thr Cys Ile Ala Val Asn Asp Met Gly Ser Ala Ser Ser Ser Ala Ser			
260	265	270	
Leu Arg Val Leu Gly Pro Gly Met Asp Gly Ile Met Val Thr Trp Lys			
275	280	285	
Asp Asn Phe Asp Ser Phe Tyr Ser Glu Val Ala Glu Leu Gly Arg Gly			
290	295	300	
Arg Phe Ser Val Val Lys Lys Cys Asp Gln Lys Gly Thr Lys Arg Ala			
305	310	315	320
Val Ala Thr Lys Phe Val Asn Lys Lys Leu Met Lys Arg Asp Gln Val			
325	330	335	
Thr His Glu Leu Gly Ile Leu Gln Ser Leu Gln His Pro Leu Leu Val			
340	345	350	
Gly Leu Leu Asp Thr Phe Glu Thr Pro Thr Ser Tyr Ile Leu Val Leu			
355	360	365	
Glu Met Ala Asp Gln Gly Arg Leu Leu Asp Cys Val Val Arg Trp Gly			
370	375	380	
Ser Leu Thr Glu Gly Lys Ile Arg Ala His Leu Gly Glu Val Leu Glu			
385	390	395	400
Ala Val Arg Tyr Leu His Asn Cys Arg Ile Ala His Leu Asp Leu Lys			
405	410	415	
Pro Glu Asn Ile Leu Val Asp Glu Ser Leu Ala Lys Pro Thr Ile Lys			
420	425	430	
Leu Ala Asp Phe Gly Asp Ala Val Gln Leu Asn Thr Thr Tyr Tyr Ile			
435	440	445	
His Gln Leu Leu Gly Asn Pro Glu Phe Ala Ala Pro Glu Ile Ile Leu			
450	455	460	
Gly Asn Pro Val Ser Leu Thr Ser Asp Thr Trp Ser Val Gly Val Leu			

465 470 475 480
 Thr Tyr Val Leu Leu Ser Gly Val Ser Pro Phe Leu Asp Asp Ser Val
 485 490 495
 Glu Glu Thr Cys Leu Asn Ile Cys Arg Leu Asp Phe Ser Phe Pro Asp
 500 505 510
 Asp Tyr Phe Lys Gly Val Ser Gln Lys Ala Lys Glu Phe Val Cys Phe
 515 520 525
 Leu Leu Gln Glu Asp Pro Ala Lys Arg Pro Ser Ala Ala Leu Ala Leu
 530 535 540
 Gln Glu Gln Trp Leu Gln Ala Gly Asn Gly Arg Ser Thr Gly Val Leu
 545 550 555 560
 Asp Thr Ser Arg Leu Thr Ser Phe Ile Glu Arg Arg Lys His Gln Asn
 565 570 575
 Asp Val Arg Pro Ile Arg Ser Ile Lys Asn Phe Leu Gln Ser Arg Leu
 580 585 590
 Leu Pro Arg Val
 595

<210> 4846

<211> 569

<212> PRT

<213> Homo sapiens

<400> 469

Met Pro Ser Ser Leu Phe Ala Asp Leu Glu Arg Asn Gly Ser Gly Gly
 1 5 10 15
 Gly Gly Gly Gly Ser Ser Gly Gly Gly Glu Thr Leu Asp Asp Gln Arg
 20 25 30
 Ala Leu Gln Leu Ala Leu Asp Gln Leu Ser Leu Leu Gly Leu Asp Ser
 35 40 45
 Asp Glu Gly Ala Ser Leu Tyr Asp Ser Glu Pro Arg Lys Lys Ser Val
 50 55 60
 Asn Met Thr Glu Cys Val Pro Val Pro Ser Ser Glu His Val Ala Glu
 65 70 75 80
 Ile Val Gly Arg Gln Gly Cys Lys Ile Lys Ala Leu Arg Ala Lys Thr

	85	90	95
Asn Thr Tyr Ile Lys Thr Pro Val Arg Gly Glu Glu Pro Val Phe Val			
100	105	110	
Val Thr Gly Arg Lys Glu Asp Val Ala Met Ala Arg Arg Glu Ile Ile			
115	120	125	
Ser Ala Ala Glu His Phe Ser Met Ile Arg Ala Ser Arg Asn Lys Asn			
130	135	140	
Thr Ala Leu Asn Gly Ala Val Pro Gly Pro Pro Asn Leu Pro Gly Gln			
145	150	155	160
Thr Thr Ile Gln Val Arg Val Pro Tyr Arg Val Val Gly Leu Val Val			
165	170	175	
Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln Gln Thr His Thr			
180	185	190	
Tyr Ile Val Thr Pro Ser Arg Asp Lys Glu Pro Val Phe Glu Val Thr			
195	200	205	
Gly Met Pro Glu Asn Val Asp Arg Ala Arg Glu Glu Ile Glu Ala His			
210	215	220	
Ile Ala Leu Arg Thr Gly Gly Ile Ile Glu Leu Thr Asp Glu Asn Asp			
225	230	235	240
Phe His Ala Asn Gly Thr Asp Val Gly Phe Asp Leu His His Gly Ser			
245	250	255	
Gly Gly Ser Gly Pro Gly Ser Leu Trp Ser Lys Pro Thr Pro Ser Ile			
260	265	270	
Thr Pro Thr Pro Gly Arg Lys Pro Phe Ser Ser Tyr Arg Asn Asp Ser			
275	280	285	
Ser Ser Ser Leu Gly Ser Ala Ser Thr Asp Ser Tyr Phe Gly Gly Gly			
290	295	300	
Thr Ser Ser Ser Ala Ala Ala Thr Gln Arg Leu Ala Asp Tyr Ser Pro			
305	310	315	320
Pro Ser Pro Ala Leu Ser Phe Ala His Asn Gly Asn Asn Asn Asn Asn			
325	330	335	
Gly Asn Gly Tyr Thr Tyr Thr Ala Gly Gly Glu Ala Ser Val Pro Ser			
340	345	350	
Pro Asp Gly Cys Pro Glu Leu Gln Pro Thr Phe Asp Pro Ala Pro Ala			
355	360	365	
Pro Pro Pro Gly Ala Pro Leu Ile Trp Ala Gln Phe Glu Arg Ser Pro			

370	375	380	
Gly Gly Gly Pro Ala Ala Pro Val Ser Ser Ser Cys Ser Ser Ser Ala			
385	390	395	400
Ser Ser Ser Ala Ser Ser Ser Ser Val Val Phe Pro Gly Gly Gly Ala			
	405	410	415
Ser Ala Pro Ser Asn Ala Asn Leu Gly Leu Leu Val His Arg Arg Leu			
	420	425	430
His Pro Gly Thr Ser Cys Pro Arg Leu Ser Pro Pro Leu His Met Ala			
	435	440	445
Pro Gly Ala Gly Glu His His Leu Ala Arg Arg Val Arg Ser Asp Pro			
	450	455	460
Gly Gly Gly Gly Leu Ala Tyr Ala Ala Tyr Ala Asn Gly Leu Gly Ala			
465	470	475	480
Gln Leu Pro Gly Leu Gln Pro Ser Asp Thr Ser Gly Ser Ser Ser Ser			
	485	490	495
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Gly Leu Arg Arg			
	500	505	510
Lys Gly Ser Arg Asp Cys Ser Val Cys Phe Glu Ser Glu Val Ile Ala			
	515	520	525
Ala Leu Val Pro Cys Gly His Asn Leu Phe Cys Met Glu Cys Ala Asn			
	530	535	540
Arg Ile Cys Glu Lys Ser Glu Pro Glu Cys Pro Val Cys His Thr Ala			
545	550	555	560
Val Thr Gln Ala Ile Arg Ile Phe Ser			
	565		

<210> 4847

<211> 302

<212> PRT

<213> Homo sapiens

<400> 470

Met Ala Leu Leu Ile Thr Pro Ala Gly Val Ala Thr Val Asn Arg His
1 5 10 15
Ser Thr Ile Pro Ser Asp Thr His Thr Ser Arg Glu Lys Pro Arg Phe

20	25	30
His Lys Pro Cys Arg Asn Asp	Leu Glu Ser Leu Leu Ser	Glu Gly Arg
35	40	45
Leu Asp Thr Ser Val Gln Thr	Pro Cys Pro Gln His	Pro His Thr Gln
50	55	60
Leu Ser Cys Glu Pro Gln Pro	Leu Glu His Ser Ser	Cys Leu Ser Thr
65	70	75
Cys Leu Ala Gly Cys Phe Leu	Pro Val Pro Ser Ser	Pro His Thr His
85	90	95
Pro Leu Leu Pro Gly Ser Arg	Trp Leu Pro Pro Pro	Leu Ala Leu Leu
100	105	110
Met Gly Thr Leu Ser Pro Gly	Leu Ala Val Lys Pro	Ser Trp Val Pro
115	120	125
Arg Phe Pro Leu Leu Ala Arg	Gln Ser Pro Ala Thr	Ser Val Gly Met
130	135	140
Pro Leu Ser Ala Ala Thr Gln	Pro Gly Ser Val Gly	Arg Leu His Phe
145	150	155
Pro Lys Leu Arg Ser Ser Ser	Pro Phe Ser Gly His	Ser Asp Glu Asn
165	170	175
Lys Ala Thr Gly Gln Gly Arg	Glu Asn Arg Asp Gln	Pro Gln Arg Pro
180	185	190
Ser His Leu Cys Glu Cys Pro	Glu Ala Ala Lys Gln	Ser Ala Thr Asn
195	200	205
Gly Val Ala Glu Thr Asn Arg	Ser Val Phe Pro Leu	Gly Ser Glu Ala
210	215	220
Arg Ser Leu Ser Leu Arg Arg	Gln Glu Ser Gln Pro	His Ser Gly Ser
225	230	235
Ser Arg Arg Glu Ser Val Ser	Cys Ser Pro Ser Phe	Trp Cys Cys Trp
245	250	255
Gln Pro Leu Ala Phe Leu Thr	Cys Gly Cys Ala Ala	Pro Ile Ser Val
260	265	270
Pro Gly Val Thr Arg Pro Ser	Pro Arg Pro Cys Cys	Val Ser Pro Pro
275	280	285
Leu Val Arg Leu Gln Ser Leu	Gly Leu Gly Pro Thr	Gln Ile
290	295	300

<210> 4848

<211> 449

<212> PRT

<213> Homo sapiens

<400> 471

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Met Pro Gly Met Met Glu Lys Gly Pro Glu Leu Leu Gly Lys Asn Arg
  1              5              10              15
Ser Ala Asn Gly Ser Ala Lys Ser Pro Ala Gly Gly Gly Gly Ser Gly
      20              25              30
Ala Ser Ser Thr Asn Gly Gly Leu His Tyr Ser Glu Pro Glu Ser Gly
      35              40              45
Cys Ser Ser Asp Asp Glu His Asp Val Gly Met Arg Val Gly Ala Glu
      50              55              60
Tyr Gln Ala Arg Ile Pro Glu Phe Asp Pro Gly Ala Thr Lys Tyr Thr
      65              70              75              80
Asp Lys Asp Asn Gly Gly Met Leu Val Trp Ser Pro Tyr His Ser Ile
      85              90              95
Pro Asp Ala Lys Leu Asp Glu Tyr Ile Ala Ile Ala Lys Glu Lys His
      100             105             110
Gly Tyr Asn Val Glu Gln Ala Leu Gly Met Leu Phe Trp His Lys His
      115             120             125
Asn Ile Glu Lys Ser Leu Ala Asp Leu Pro Asn Phe Thr Pro Phe Pro
      130             135             140
Asp Glu Trp Thr Val Glu Asp Lys Val Leu Phe Glu Gln Ala Phe Ser
      145             150             155             160
Phe His Gly Lys Ser Phe His Arg Ile Gln Gln Met Leu Pro Asp Lys
      165             170             175
Thr Ile Ala Ser Leu Val Lys Tyr Tyr Tyr Ser Trp Lys Lys Thr Arg
      180             185             190
Ser Arg Thr Ser Leu Met Asp Arg Gln Ala Arg Lys Leu Ala Asn Arg
      195             200             205
His Asn Gln Gly Asp Ser Asp Asp Asp Val Glu Glu Thr His Pro Met
      210             215             220
Asp Gly Asn Asp Ser Asp Tyr Asp Pro Lys Lys Glu Ala Lys Lys Glu

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225 230 235 240
 Gly Asn Thr Glu Gln Pro Val Gln Thr Ser Lys Ile Gly Leu Gly Arg
 245 250 255
 Arg Glu Tyr Gln Ser Leu Gln His Arg His His Ser Gln Arg Ser Lys
 260 265 270
 Cys Arg Pro Pro Lys Gly Met Tyr Leu Thr Gln Glu Asp Val Val Ala
 275 280 285
 Val Ser Cys Ser Pro Asn Ala Ala Asn Thr Ile Leu Arg Gln Leu Asp
 290 295 300
 Met Glu Leu Ile Ser Leu Lys Arg Gln Val Gln Asn Ala Lys Gln Val
 305 310 315 320
 Asn Ser Ala Leu Lys Gln Lys Met Glu Gly Gly Ile Glu Glu Phe Lys
 325 330 335
 Pro Pro Glu Ser Asn Gln Lys Ile Asn Ala Arg Trp Thr Thr Glu Glu
 340 345 350
 Gln Leu Leu Ala Val Gln Gly Val Arg Lys Tyr Gly Lys Asp Phe Gln
 355 360 365
 Ala Ile Ala Asp Val Ile Gly Asn Lys Thr Val Gly Gln Val Lys Asn
 370 375 380
 Phe Phe Val Asn Tyr Arg Arg Arg Phe Asn Leu Glu Glu Val Leu Gln
 385 390 395 400
 Glu Trp Glu Ala Glu Gln Gly Thr Gln Ala Ser Asn Gly Asp Ala Ser
 405 410 415
 Thr Leu Gly Glu Glu Thr Lys Ser Ala Ser Asn Val Pro Ser Gly Lys
 420 425 430
 Ser Thr Asp Glu Glu Glu Glu Val Cys Leu Cys Met Glu Phe Glu Leu
 435 440 445
 Ile

<210> 4849

<211> 244

<212> PRT

<213> Homo sapiens

<400> 472

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Thr Val Asn Ile Asn
 1 5 10 15
 Gly Leu Asn Ala Pro Ile Lys Gly His Arg Leu Ala Asn Trp Ile Lys
 20 25 30
 Ser Gln Asp Pro Ser Val Cys Cys Ile Gln Glu Thr His Leu Met Arg
 35 40 45
 Lys Phe Thr His Arg Phe Asn Ile Lys Gly Trp Arg Lys Ile Tyr Gln
 50 55 60
 Glu Asn Gly Lys Gln Lys Lys Ala Gly Val Ala Ile Leu Val Ser Asp
 65 70 75 80
 Lys Thr Asp Phe Lys Pro Thr Lys Ile Lys Gly Asp Lys Gly His Tyr
 85 90 95
 Ile Met Val Lys Gly Ser Met Gln Gln Glu Glu Leu Thr Ile Leu Asn
 100 105 110
 Ile Tyr Ala Pro Asn Thr Arg Ala Pro Arg Phe Ile Lys Gln Val Leu
 115 120 125
 Arg Asp Leu Gln Arg Asp Leu Asp Ser His Thr Ile Ile Met Gly Asp
 130 135 140
 Phe Asn Thr Glu Leu Ser Ile Leu Glu Arg Ser Thr Arg Gln Lys Val
 145 150 155 160
 Asn Lys Asp Ile Gln Asp Leu Asn Ser Ala Leu Gln Gln Thr Asp Pro
 165 170 175
 Ile Asp Ile His Arg Asn Leu His Leu Lys Ser Thr Glu Tyr Thr Leu
 180 185 190
 Phe Ser Ala Pro His Ile Thr Tyr Ser Lys Phe Asp His Ile Ile Gly
 195 200 205
 Ser Lys Ala Leu Leu Thr Lys Cys Lys Arg Thr Glu Ile Thr Thr Asn
 210 215 220
 Cys Leu Leu Asp His Ser Ala Ile Lys Phe Glu Leu Arg Ile Lys Lys
 225 230 235 240
 Leu Thr Gln Asn

<210> 4850

<211> 695

<212> PRT

<213> Homo sapiens

<400> 473

Met Val Tyr Pro Tyr Pro Gly Ala Arg Ala Glu Glu Lys Leu Gly Gly
 1 5 10 15
 Thr Arg Asp Pro Thr Tyr Gln Glu Arg Ala Ala Pro Gln Thr Gln Pro
 20 25 30
 Leu Gly Lys Glu Thr Asp Ser Leu Ser Ala Gly Phe Val Val Val Met
 35 40 45
 Gly Val Asp Leu Ser Arg Cys Gly Pro Asp His Thr Ala Ser Arg Cys
 50 55 60
 Pro Trp Asp Pro Gly Leu Leu Leu Arg Phe Leu Ala Ala Met Ala Ala
 65 70 75 80
 Val Gly Ala Leu Glu Pro Leu Leu Pro Gly Pro Leu Leu Ala Val His
 85 90 95
 Pro His Ala Gly Thr Ala Pro Pro Ala Asn Gln Leu Pro Trp Pro Val
 100 105 110
 Leu Cys Ser Pro Val Ala Gly Val Ile Leu Leu Ala Leu Gly Ala Leu
 115 120 125
 Leu Val Leu Gln Leu Ile Arg Arg Arg Arg Arg Glu His Gly Ala Leu
 130 135 140
 Trp Leu Pro Pro Gly Phe Thr Arg Arg Pro Arg Thr Gln Ser Ala Pro
 145 150 155 160
 His Arg Arg Arg Pro Pro Leu Gly Glu Asp Ser Ile Gly Leu Lys Ala
 165 170 175
 Leu Lys Pro Lys Ala Glu Val Asp Glu Asp Gly Val Val Met Cys Ser
 180 185 190
 Gly Pro Glu Glu Gly Glu Glu Ala Glu Glu Thr Gly Pro Pro Ser Thr
 195 200 205
 Cys Gln Leu Trp Ser Leu Ser Gly Gly Cys Gly Ala Leu Pro Gln Ala
 210 215 220
 Ala Met Leu Thr Pro Pro Gln Glu Ser Glu Met Glu Ala Pro Asp Leu
 225 230 235 240
 Asp Thr Arg Gly Pro Asp Gly Val Thr Pro Leu Met Ser Ala Val Cys

	245		250		255
Cys Gly Glu Val Gln Ser Gly Thr Phe Gln Gly Ala Trp Leu Gly Cys					
	260		265		270
Pro Glu Pro Trp Glu Pro Leu Leu Asp Gly Gly Ala Cys Pro Gln Ala					
	275		280		285
His Thr Val Gly Thr Gly Glu Thr Pro Leu His Leu Ala Ala Arg Phe					
	290		295		300
Ser Arg Pro Thr Ala Ala Arg Arg Leu Leu Glu Ala Gly Ala Asn Pro					
305		310		315	320
Asn Gln Pro Asp Arg Ala Gly Arg Thr Pro Leu His Ala Ala Val Ala					
	325		330		335
Ala Asp Ala Arg Glu Val Cys Gln Leu Leu Leu Arg Ser Arg Gln Thr					
	340		345		350
Ala Val Asp Ala Arg Thr Glu Asp Gly Thr Thr Pro Leu Met Leu Ala					
	355		360		365
Ala Arg Leu Ala Val Glu Asp Leu Val Glu Glu Leu Ile Ala Ala Gln					
	370		375		380
Ala Asp Val Gly Ala Arg Asp Lys Trp Gly Lys Thr Ala Leu His Trp					
385		390		395	400
Ala Ala Ala Val Asn Asn Ala Arg Ala Ala Arg Ser Leu Leu Gln Ala					
	405		410		415
Gly Ala Asp Lys Asp Ala Gln Asp Asn Arg Glu Gln Thr Pro Leu Phe					
	420		425		430
Leu Ala Ala Arg Glu Gly Ala Val Glu Val Ala Gln Leu Leu Leu Gly					
	435		440		445
Leu Gly Ala Ala Arg Glu Leu Arg Asp Gln Ala Gly Leu Ala Pro Ala					
	450		455		460
Asp Val Ala His Gln Arg Asn His Trp Asp Leu Leu Thr Leu Leu Glu					
465		470		475	480
Gly Ala Gly Pro Pro Glu Ala Arg His Lys Ala Thr Pro Gly Arg Glu					
	485		490		495
Ala Gly Pro Phe Pro Arg Ala Arg Thr Val Ser Val Ser Val Pro Pro					
	500		505		510
His Gly Gly Gly Ala Leu Pro Arg Cys Arg Thr Leu Ser Ala Gly Ala					
	515		520		525
Gly Pro Arg Gly Gly Gly Ala Cys Leu Gln Ala Arg Thr Trp Ser Val					

530	535	540	
Asp Leu Ala Ala Arg Gly Gly Gly Ala Tyr Ser His Cys Arg Ser Leu			
545	550	555	560
Ser Gly Val Gly Ala Gly Gly Gly Pro Thr Pro Arg Gly Arg Arg Phe			
	565	570	575
Ser Ala Gly Met Arg Gly Pro Arg Pro Asn Pro Ala Ile Met Arg Gly			
	580	585	590
Arg Tyr Gly Val Ala Ala Gly Arg Gly Gly Arg Val Ser Thr Asp Asp			
595	600	605	
Trp Pro Cys Asp Trp Val Ala Leu Gly Ala Cys Gly Ser Ala Ser Asn			
610	615	620	
Ile Pro Ile Pro Pro Pro Cys Leu Thr Pro Ser Pro Glu Arg Gly Ser			
625	630	635	640
Pro Gln Leu Asp Cys Gly Pro Pro Ala Leu Gln Glu Met Pro Ile Asn			
	645	650	655
Gln Gly Gly Glu Gly Lys Lys Ile Glu Glu Tyr Met Val Gly Arg Asn			
	660	665	670
Ser Lys Asn Asp Tyr Pro Leu Lys Gly Arg Leu Glu Gly Leu Pro Gly			
675	680	685	
Phe Lys Met Asp Pro Pro Lys			
690	695		

<210> 4851

<211> 211

<212> PRT

<213> Homo sapiens

<400> 474

Met Ser Ser Val Val Gly Leu Phe Leu Cys Phe Thr Ser Cys Ser Ser			
1	5	10	15
His Phe Ser Leu Tyr Leu Pro Lys Ser Trp Thr Ile Gln Val Gly Leu			
	20	25	30
Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu Val Glu Lys Ile			
	35	40	45
Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly Asn Asp Ile Ala			

50	55	60			
Leu Met Lys	Leu Ala Gly Pro Leu Thr Phe Asn Glu Met	Ile Gln Pro			
65	70	75	80		
Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp Gly Lys Val Cys					
	85	90	95		
Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Gly Asp Ala Ser Pro					
100	105	110			
Val Leu Asn His Ala Ala Val Pro Leu Ile Ser Asn Lys Ile Cys Asn					
115	120	125			
His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro Ser Met Leu Cys Ala					
130	135	140			
Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly					
145	150	155	160		
Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys Leu Val Gly Ala Thr					
	165	170	175		
Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys Pro Gly Val Tyr Thr					
180	185	190			
Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu Gln Met Glu Arg Asp					
195	200	205			
Leu Lys Thr					
210					

<210> 4852

<211> 193

<212> PRT

<213> Homo sapiens

<400> 475

Met His Ala Leu Lys Met Thr Trp His Val His Cys Phe Thr Cys Ala			
1	5	10	15
Ala Cys Lys Thr Pro Ile Arg Asn Arg Ala Phe Tyr Met Glu Glu Gly			
20	25	30	
Val Pro Tyr Cys Glu Arg Gly Thr His Trp Pro Val Arg Val Arg Arg			
35	40	45	
Asp Gly Ala Trp Gly Arg His Glu Ser Arg Ser Ser Phe Ser Leu Pro			

50	55	60
Pro Phe Ser Asp Tyr Glu Lys Met Phe Gly Thr Lys Cys His Gly Cys		
65	70	75
Asp Phe Lys Ile Asp Ala Gly Asp Arg Phe Leu Glu Ala Leu Gly Phe		
85	90	95
Ser Trp His Asp Thr Cys Phe Val Cys Ala Val Arg Ala Pro Pro Leu		
100	105	110
Glu Leu Ser Pro Lys Pro Thr Gly Pro Leu Phe Ile Pro Gln Glu Met		
115	120	125
Gln Glu Lys Leu Gly Arg Gly Leu Ser Cys Cys Pro Gln Pro His Val		
130	135	140
Thr Gly Pro Leu Leu Ser Leu Asp Met Ser Asp Gln Pro Gly Arg Lys		
145	150	155
Asp Leu Leu Leu Gln Glu Gly Gln Ala Ser Leu Gln Glu Pro Cys Leu		
165	170	175
Leu Ser Cys Val Ser Pro Phe Cys Pro Gln Leu Pro Arg Trp Pro Leu		
180	185	190
Ala		

<210> 4853

<211> 134

<212> PRT

<213> Homo sapiens

<400> 476

Met Cys Gln Val Tyr Phe Val Lys Leu Leu Ile Leu Gly Val Leu Leu
1 5 10 15
Cys Phe Leu Leu Val Arg Gln Asp Leu Thr Leu Ser Pro Arg Leu Glu
20 25 30
Cys Ser Gly Ala Ile Trp Ala His Cys Asn Pro Arg Leu Leu Gly Ile
35 40 45
Ser Asn Leu Pro Ala Leu Ala Ser Gln Val Ala Glu Thr Thr Gly Met
50 55 60

Ser His His Thr Gln Leu Thr Thr Cys Asn Phe Phe Asp Arg Asp Arg
 65 70 75 80
 Ser Cys His Val Thr Gln Thr Asp Leu Lys Thr Pro Gly Leu Arg Arg
 85 90 95
 Pro Thr His Leu Gly Leu Pro Lys Cys Trp Asp Tyr Arg Cys Glu Pro
 100 105 110
 Leu His Leu Thr Gln Phe Val Ile Leu Asn Leu Phe Leu Leu Ser Cys
 115 120 125
 Phe Ser Phe Phe Phe Leu
 130

<210> 4854

<211> 568

<212> PRT

<213> Homo sapiens

<400> 477

Met Gly Ser Glu Val Val Ala Gly Asn Ser Val Gly Pro Thr Met Gly
 1 5 10 15
 Ala Ala Ser Ser Gly Pro Leu Pro Pro Pro Pro Pro Pro Leu Pro Pro
 20 25 30
 Ser Ser Asp Thr Pro Glu Thr Val Gln Asn Gly Pro Val Thr Pro Pro
 35 40 45
 Met Pro Pro Pro Pro Pro Leu Pro Gly Pro Ala Ala Glu Thr Val Pro
 50 55 60
 Ala Pro Pro Leu Ala Pro Pro Leu Pro Ser Ala Pro Pro Leu Pro Gly
 65 70 75 80
 Thr Ser Ser Pro Thr Val Val Phe Asn Ser Gly Leu Ala Ala Val Lys
 85 90 95
 Ile Lys Lys Pro Ile Lys Thr Lys Phe Arg Met Pro Val Phe Asn Trp
 100 105 110
 Val Ala Leu Lys Pro Asn Gln Ile Asn Gly Thr Val Phe Asn Glu Ile
 115 120 125
 Asp Asp Glu Arg Ile Leu Glu Asp Leu Asn Val Asp Glu Phe Glu Glu
 130 135 140

Ile Phe Lys Thr Lys Ala Gln Gly Pro Ala Ile Asp Leu Ser Ser Ser
 145 150 155 160
 Lys Gln Lys Ile Pro Gln Lys Gly Ser Asn Lys Val Thr Leu Leu Glu
 165 170 175
 Ala Asn Arg Ala Lys Asn Leu Ala Ile Thr Leu Arg Lys Ala Gly Lys
 180 185 190
 Thr Ala Asp Glu Ile Cys Lys Ala Ile His Val Phe Asp Leu Lys Thr
 195 200 205
 Leu Pro Val Asp Phe Val Glu Cys Leu Met Arg Phe Leu Pro Thr Glu
 210 215 220
 Asn Glu Val Lys Val Leu Arg Leu Tyr Glu Arg Glu Arg Lys Pro Leu
 225 230 235 240
 Glu Asn Leu Ser Asp Glu Asp Arg Phe Met Met Gln Phe Ser Lys Ile
 245 250 255
 Glu Arg Leu Met Gln Lys Met Thr Ile Met Ala Phe Ile Gly Asn Phe
 260 265 270
 Ala Glu Ser Ile Gln Met Leu Thr Pro Gln Leu His Ala Ile Ile Ala
 275 280 285
 Ala Ser Val Ser Ile Lys Ser Ser Gln Lys Leu Lys Lys Ile Leu Glu
 290 295 300
 Ile Ile Leu Ala Leu Gly Asn Tyr Met Asn Ser Ser Lys Arg Gly Ala
 305 310 315 320
 Val Tyr Gly Phe Lys Leu Gln Ser Leu Asp Leu Leu Leu Asp Thr Lys
 325 330 335
 Ser Thr Asp Arg Lys Gln Thr Leu Leu His Tyr Ile Ser Asn Val Val
 340 345 350
 Lys Glu Lys Tyr His Gln Val Ser Leu Phe Tyr Asn Glu Leu His Tyr
 355 360 365
 Val Glu Lys Ala Ala Ala Val Ser Leu Glu Asn Val Leu Leu Asp Val
 370 375 380
 Lys Glu Leu Gln Arg Gly Met Asp Leu Thr Lys Arg Glu Tyr Thr Met
 385 390 395 400
 His Asp His Asn Thr Leu Leu Lys Glu Phe Ile Leu Asn Asn Glu Gly
 405 410 415
 Lys Leu Lys Lys Leu Gln Asp Asp Ala Lys Ile Ala Gln Asp Ala Phe
 420 425 430

Asp Asp Val Val Lys Tyr Phe Gly Glu Asn Pro Lys Thr Thr Pro Pro
 435 440 445
 Ser Val Phe Phe Pro Val Phe Val Arg Phe Val Lys Ala Tyr Lys Gln
 450 455 460
 Ala Glu Glu Glu Asn Glu Leu Arg Lys Lys Gln Glu Gln Ala Leu Met
 465 470 475 480
 Glu Lys Leu Leu Glu Gln Glu Ala Leu Met Glu Gln Gln Asp Pro Lys
 485 490 495
 Ser Pro Ser His Lys Ser Lys Arg Gln Gln Gln Glu Leu Ile Ala Glu
 500 505 510
 Leu Arg Arg Arg Gln Val Lys Asp Asn Arg His Val Tyr Glu Gly Lys
 515 520 525
 Asp Gly Ala Ile Glu Asp Ile Ile Thr Ala Leu Lys Lys Asn Asn Ile
 530 535 540
 Thr Lys Phe Pro Asn Val His Ser Arg Val Arg Ile Ser Ser Ser Thr
 545 550 555 560
 Pro Val Val Glu Asp Thr Gln Ser
 565

<210> 4855

<211> 415

<212> PRT

<213> Homo sapiens

<400> 478

Met Thr Leu Ala Ala Ser Ser Gln Arg Ser Gln Ile Ile Arg Ser Lys
 1 5 10 15
 Phe Arg Ser Val Leu Gln Leu Arg Ile His Arg Arg Asn Gln Glu Gln
 20 25 30
 Ile Ser Asp Pro Asp Pro Trp Ile Ser Ala Ser Asp Pro Pro Leu Ala
 35 40 45
 Pro Ala Leu Pro Ser Gly Thr Ala Pro Phe Leu Phe Ser Pro Gly Val
 50 55 60
 Leu Leu Pro Glu Pro Glu Tyr Cys Pro Pro Trp Arg Ser Pro Lys Lys
 65 70 75 80

Glu Ser Pro Lys Ile Ser Gln Arg Trp Arg Glu Ser Lys Pro Arg Gly
 85 90 95
 Asn Leu Thr Tyr His Gln Tyr Met Pro Pro Glu Pro Arg Gln Gly Ser
 100 105 110
 Arg Ala Asp Pro Gln Ala Glu Gly Ser Ala Leu Gly Pro Pro Gly Pro
 115 120 125
 Ser Leu Trp Glu Gly Thr Asp Ser Gln Gln Pro His Pro Arg Met Lys
 130 135 140
 Pro Ser Pro Leu Thr Pro Cys Pro Pro Gly Val Pro Ser Pro Ser Pro
 145 150 155 160
 Pro Pro His Lys Leu Glu Leu Gln Thr Leu Lys Leu Glu Glu Leu Thr
 165 170 175
 Val Ser Glu Leu Arg Gln Gln Leu Arg Leu Arg Gly Leu Pro Val Ser
 180 185 190
 Gly Thr Lys Ser Met Leu Leu Glu Arg Met Arg Gly Gly Ala Pro Pro
 195 200 205
 Arg Glu Arg Pro Lys Pro Arg Arg Glu Asp Ser Pro Ala Gly Ala Pro
 210 215 220
 Trp Pro Arg Leu Lys Pro Lys Ala Leu Ala Ala Arg Arg Gln Gly
 225 230 235 240
 Ser Val Lys Pro Ser Ala Ala Ser His Arg Pro Pro Leu Pro Arg Ala
 245 250 255
 Ala Asp Thr Pro Gly Thr Ala Pro Ala Pro Thr Pro Thr Pro Ala Pro
 260 265 270
 Ala Ala Ala Pro Ala Leu Thr Pro Ser Ser Gly Pro Gly Ser Ala Ala
 275 280 285
 Leu Thr Leu Glu Glu Glu Leu Gln Glu Ala Ile Arg Arg Ala Gln Leu
 290 295 300
 Leu Pro Asn Arg Gly Ile Asp Asp Ile Leu Glu Asp Gln Val Glu Pro
 305 310 315 320
 Asp Asp Pro Leu Pro Pro Ile Pro Leu Asp Phe Pro Gly Ser Phe Asp
 325 330 335

 Val Leu Ser Pro Ser Pro Asp Ser Glu Gly Leu Ser Ser Val Phe Ser
 340 345 350
 Ser Ser Leu Pro Ser Pro Thr Asn Ser Ser Ser Pro Ser Pro Arg Asp

355 360 365
 Pro Thr Asp Ser Leu Asp Trp Leu Glu Ala Leu Ser Gly Gly Pro Pro
 370 375 380
 Leu Gly Ser Gly Pro Pro Pro Pro Ser Ile Phe Ser Ala Asp Leu Ser
 385 390 395 400
 Asp Ser Ser Ser Ser Arg Leu Trp Asp Leu Leu Glu Asp Pro Trp
 405 410 415

<210> 4856

<211> 197

<212> PRT

<213> Homo sapiens

<400> 479

Met Ser Cys Tyr Pro Thr Phe Asp Trp Ala Thr Trp Ala Glu Gly Glu
 1 5 10 15
 Lys Gly Val Trp Lys Ser Pro Pro Ser Ile Gln Thr Gly Asp Gln Ile
 20 25 30
 Gly Val Arg Glu Glu Leu Leu Asn Ala Leu His Ser Ser Leu Ala Arg
 35 40 45
 Pro Ala Ile Lys Lys His Gln His Pro Lys Gly Lys Lys Lys Arg Arg
 50 55 60
 Ser Arg Glu Lys His Gln Glu Ser Thr Thr Asp Pro Gly Ser Pro Lys
 65 70 75 80
 Lys Cys Arg Ala Arg Phe Gly Leu Asn Gln Gln Thr Asp Trp Cys Gly
 85 90 95
 Pro Cys Arg Arg Lys Lys Lys Cys Ile Arg Tyr Leu Pro Gly Glu Gly
 100 105 110
 Arg Cys Pro Ser Pro Val Pro Ser Asp Asp Ser Ala Leu Gly Cys Pro
 115 120 125
 Gly Ser Pro Ala Pro Gln Asp Ser Pro Ser Tyr His Leu Leu Pro Arg
 130 135 140
 Phe Pro Thr Glu Leu Leu Thr Ser Pro Ala Glu Pro Ala Pro Thr Ser
 145 150 155 160
 Pro Gly Leu Ser Thr Ala Leu Ser Leu Pro Thr Pro Gly Pro Pro Gln

165 170 175
 Ala Pro Arg Ser Thr Leu Gln Ser Thr Gln Val Gln Gln Gln Glu Ser
 180 185 190
 Gln Arg Gln Val Ala
 195

<210> 4857

<211> 209

<212> PRT

<213> Homo sapiens

<400> 480

Met Lys Lys Leu Thr Pro Lys Gln Lys Phe Ser Glu Asp Leu Glu Ser
 1 5 10 15
 Tyr Lys Ile Ser Val Val Met Gln Glu Ser Ala Glu Lys Leu Ser Glu
 20 25 30
 Lys Leu His Lys Cys Lys Glu Phe Val Asp Ser Cys Arg Leu Thr Phe
 35 40 45
 Pro Thr Ser Gly Asp Glu Tyr Ser Arg Gly Phe Leu Gln Asn Leu Asn
 50 55 60
 Leu Ile Gln Asp Gln Asn Ala Gln Thr Arg Trp Lys Gln Gly Arg Tyr
 65 70 75 80
 Asp Glu Asp Gly Lys Pro Phe Asn Gln Arg Ser Leu Leu Leu Gly His
 85 90 95
 Glu Arg Ile Leu Thr Arg Ala Lys Ser Tyr Glu Cys Ser Glu Cys Gly
 100 105 110
 Lys Val Ile Arg Arg Lys Ala Trp Phe Asp Gln His Gln Arg Ile His
 115 120 125
 Phe Leu Glu Asn Pro Phe Glu Cys Lys Val Cys Gly Gln Ala Phe Arg
 130 135 140
 Gln Arg Ser Ala Leu Thr Val His Lys Gln Cys His Leu Gln Asn Lys
 145 150 155 160
 Pro Tyr Arg Cys His Asp Cys Gly Lys Cys Phe Arg Gln Leu Ala Phe
 165 170 175
 Leu Leu Asn Ile Arg Gly Phe Thr Pro Lys Lys Asn Leu Ile Asn Val

	180		185		190
Ala	Asn	Val	Lys	Lys	Arg
		Leu	Val	Arg	Ile
			Gln	Pro	Leu
				Phe	Asp
					Ile
	195		200		205
Arg					

<210> 4858

<211> 259

<212> PRT

<213> Homo sapiens

<400> 481

Met	Glu	Cys	His	Leu	Lys	Thr	His	Tyr	Lys	Met	Glu	Tyr	Lys	Cys	Arg
1				5					10					15	
Ile	Cys	Gln	Thr	Val	Lys	Ala	Asn	Gln	Leu	Glu	Leu	Glu	Thr	Arg	Thr
				20				25						30	
Arg	Glu	His	Arg	Leu	Gly	Asn	His	Tyr	Lys	Cys	Asp	Gln	Cys	Gly	Tyr
				35				40						45	
Leu	Ser	Lys	Thr	Ala	Asn	Lys	Leu	Ile	Glu	His	Val	Arg	Val	His	Thr
				50				55						60	
Gly	Glu	Arg	Pro	Phe	His	Cys	Asp	Gln	Cys	Ser	Tyr	Ser	Cys	Lys	Arg
65					70				75					80	
Lys	Asp	Asn	Leu	Asn	Leu	His	Lys	Lys	Leu	Lys	His	Ala	Pro	Arg	Gln
				85					90					95	
Thr	Phe	Ser	Cys	Glu	Glu	Cys	Leu	Phe	Lys	Thr	Thr	His	Pro	Phe	Val
				100					105					110	
Phe	Ser	Arg	His	Val	Lys	Lys	His	Gln	Ser	Gly	Asp	Cys	Pro	Glu	Glu
				115				120						125	
Asp	Lys	Lys	Gly	Leu	Cys	Pro	Ala	Pro	Lys	Glu	Pro	Ala	Gly	Pro	Gly
				130				135						140	
Ala	Pro	Leu	Leu	Val	Val	Gly	Ser	Ser	Arg	Asn	Leu	Leu	Ser	Pro	Leu
145					150				155					160	
Ser	Val	Met	Ser	Ala	Ser	Gln	Ala	Leu	Gln	Thr	Val	Ala	Leu	Ser	Ala
				165					170					175	

Ala His Gly Ser Ser Ser Glu Pro Asn Leu Ala Leu Lys Ala Leu Ala
 180 185 190
 Phe Asn Gly Ser Pro Leu Arg Phe Asp Lys Tyr Arg Asn Ser Asp Phe
 195 200 205
 Ala His Leu Ile Pro Leu Thr Met Leu Tyr Pro Lys Asn His Leu Asp
 210 215 220
 Leu Thr Phe His Pro Pro Arg Pro Gln Thr Ala Pro Pro Ser Ile Pro
 225 230 235 240
 Ser Pro Lys His Pro Phe Leu Ala Tyr Leu Gly Leu Arg Glu Arg Ala
 245 250 255
 Glu Thr Val

<210> 4859

<211> 160

<212> PRT

<213> Homo sapiens

<400> 482

Met Ile Ser Ala Tyr Cys Asn Leu His Leu Leu Gly Ser Ser Asn Ser
 1 5 10 15
 Ser Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Ala Cys Gln His
 20 25 30
 Ala Trp Leu Ile Trp Gly Tyr Ser Ser Phe Leu Arg Gln Ser Phe Ala
 35 40 45
 Leu Ser Pro Lys Leu Glu Cys Ser Gly Thr Ile Ser Ala Leu Cys Ser
 50 55 60
 Leu Cys Leu Leu Gly Ser Ser Asp Ser Pro Ser Ser Ala Ser Gln Val
 65 70 75 80
 Ala Gly Ile Thr Gly Ala Cys Tyr His Ala Gln Leu Ile Phe Val Phe
 85 90 95
 Leu Val Gln Met Arg Phe His His Leu Gly Gln Ala Gly Leu Glu Leu
 100 105 110
 Leu Thr Ser Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile
 115 120 125

Thr Asp Val Asn His His Ala Gln Pro Leu Trp Gly Tyr Ser Cys Pro
 130 135 140
 Tyr Phe Ser Phe Ile Val Leu Tyr Lys Lys Val Val Leu Leu Tyr Leu
 145 150 155 160

<210> 4860

<211> 276

<212> PRT

<213> Homo sapiens

<400> 483

Met Asn Val Gln Ser Ser Arg Ser His Ala Ile Phe Thr Ile His Leu
 1 5 10 15
 Cys Gln Met Arg Met Cys Thr Gln Pro Asp Leu Val Asn Glu Ala Val
 20 25 30
 Thr Gly Leu Pro Asp Gly Thr Pro Pro Ser Ser Glu Tyr Glu Thr Leu
 35 40 45
 Thr Ala Lys Phe His Phe Val Asp Leu Ala Gly Ser Glu Arg Leu Lys
 50 55 60
 Arg Thr Gly Ala Thr Gly Glu Arg Ala Lys Glu Gly Ile Ser Ile Asn
 65 70 75 80
 Cys Gly Leu Val Gly Thr Trp Trp Val Ile Ser Pro Ser Thr His Thr
 85 90 95
 Ala Gln Ser Gln Thr Pro Pro Arg Pro Cys Ser Pro Thr Pro Ala Glu
 100 105 110
 Ser Ser Leu Asp Ile Leu Pro Ile Ser Pro Ser Leu Ser Gly Val Thr
 115 120 125
 Pro Val Pro Ser Phe Pro Ile Ser Pro Thr Tyr Pro Cys Ala Tyr Lys
 130 135 140
 Pro Thr Gln Gly Ala Arg Gly Leu Leu Gly Pro Lys Arg Gln Leu Ala
 145 150 155 160
 Leu Gly Asn Val Ile Ser Ala Leu Gly Asp Gln Ser Lys Lys Val Val
 165 170 175
 His Val Ser Tyr Arg Asp Ser Lys Leu Thr Arg Leu Leu Gln Asp Ser
 180 185 190

Leu	Gly	Gly	Asn	Ser	Gln	Thr	Ile	Met	Ile	Ala	Cys	Val	Ser	Pro	Ser
195				200				205							
Asp	Arg	Asp	Phe	Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg
210				215				220							
Ala	Arg	Asn	Ile	Lys	Asn	Lys	Val	Val	Val	Asn	Gln	Asp	Lys	Thr	Ser
225				230				235				240			
Gln	Gln	Ile	Ser	Ala	Leu	Arg	Ala	Glu	Ile	Ala	Arg	Leu	Gln	Met	Glu
245				250				255							
Leu	Met	Glu	Tyr	Lys	Ala	Val	Ser	Met	Leu	Leu	Gly	Ile	Ala	Gln	His
260				265				270							
Ser	Pro	Trp	Ser												
275															

4861 <210>

<211> 159

<212> PRT

〈213〉 Homo sapiens

<400> 484

Met	Gln	Gly	Ala	Glu	Leu	His	Pro	Arg	Cys	His	Ala	Trp	Val	Ser	Val
1				5					10					15	
Phe	Ala	Leu	Gly	Leu	Thr	Leu	Lys	Arg	Thr	Gly	Gln	Pro	Gln	Ala	Pro
			20					25					30		
Ser	Thr	Gly	Asp	Leu	Pro	Ser	Gly	Pro	Ala	Gly	Lys	Ala	Gly	Ser	Arg
		35				40						45			
Glu	Leu	Arg	Gly	Glu	Pro	Pro	Thr	Trp	Val	Trp	His	Pro	Pro	Ile	Ser
	50					55					60				
Asp	Asn	Phe	His	Gln	Glu	Asp	Ser	Lys	Arg	Pro	His	Val	Cys	Phe	Asp
65				70					75					80	
Gly	Glu	Asp	Pro	Glu	Val	Asp	Gly	Phe	Arg	Gly	Cys	Pro	Leu	Asp	Gly
			85					90					95		
Glu	Leu	Gly	Pro	Cys	Gly	Lys	Ser	His	Ala	Ser	Phe	Gly	Arg	Pro	Arg
		100						105				110			
Pro	Val	Ala	Pro	Thr	Leu	His	Pro	His	Pro	Tyr	Pro	Cys	Ser	Cys	Cys
	115					120					125				

Pro Ser Ile Lys Pro Pro Leu Arg Gly Leu Thr Gly Arg Gly Gly Gln
 130 135 140
 Ala Trp Arg Gly Ser His Tyr Arg Thr Pro Gly His Met Thr Arg
 145 150 155

<210> 4862

<211> 781

<212> PRT

<213> Homo sapiens

<400> 485

Met Lys Ser Ser Gly Pro Val Glu Arg Leu Leu Arg Ala Leu Gly Arg
 1 5 10 15
 Arg Asp Ser Ser Arg Ala Ala Ser Arg Pro Arg Lys Ala Glu Pro His
 20 25 30
 Ser Phe Arg Glu Lys Val Phe Arg Lys Lys Pro Pro Val Cys Ala Val
 35 40 45
 Cys Lys Val Thr Ile Asp Gly Thr Gly Val Ser Cys Arg Val Cys Lys
 50 55 60
 Val Ala Thr His Arg Lys Cys Glu Ala Lys Val Thr Ser Ala Cys Gln
 65 70 75 80
 Ala Leu Pro Pro Val Glu Leu Arg Arg Asn Thr Ala Pro Val Arg Arg
 85 90 95
 Ile Glu His Leu Gly Ser Thr Lys Ser Leu Asn His Ser Lys Gln Arg
 100 105 110
 Ser Thr Leu Pro Arg Ser Phe Ser Leu Asp Pro Leu Met Glu Arg Arg
 115 120 125
 Trp Asp Leu Asp Leu Thr Tyr Val Thr Glu Arg Ile Leu Ala Ala Ala
 130 135 140
 Phe Pro Ala Arg Pro Asp Glu Gln Arg His Arg Gly His Leu Arg Glu
 145 150 155 160
 Leu Ala His Val Leu Gln Ser Lys His Arg Asp Lys Tyr Leu Leu Phe
 165 170 175
 Asn Leu Ser Glu Lys Arg His Asp Leu Thr Arg Leu Asn Pro Lys Val
 180 185 190

Gln Asp Phe Gly Trp Pro Glu Leu His Ala Pro Pro Leu Asp Lys Leu
 195 200 205
 Cys Ser Ile Cys Lys Ala Met Glu Thr Trp Leu Ser Ala Asp Pro Gln
 210 215 220
 His Val Val Val Leu Tyr Cys Lys Gly Asn Lys Gly Lys Leu Gly Val
 225 230 235 240
 Ile Val Ser Ala Tyr Met His Tyr Ser Lys Ile Ser Ala Gly Ala Asp
 245 250 255
 Gln Ala Leu Ala Thr Leu Thr Met Arg Lys Phe Cys Glu Asp Lys Val
 260 265 270
 Ala Thr Glu Leu Gln Pro Ser Gln Arg Arg Tyr Ile Ser Tyr Phe Ser
 275 280 285
 Gly Leu Leu Ser Gly Ser Ile Arg Met Asn Ser Ser Pro Leu Phe Leu
 290 295 300
 His Tyr Val Leu Ile Pro Met Leu Pro Ala Phe Glu Pro Gly Thr Gly
 305 310 315 320
 Phe Gln Pro Phe Leu Lys Ile Tyr Gln Ser Met Gln Leu Val Tyr Thr
 325 330 335
 Ser Gly Val Tyr His Ile Ala Gly Pro Gly Pro Gln Gln Leu Cys Ile
 340 345 350
 Ser Leu Glu Pro Ala Leu Leu Leu Lys Gly Asp Val Met Val Thr Cys
 355 360 365
 Tyr His Lys Gly Gly Arg Gly Thr Asp Arg Thr Leu Val Phe Arg Val
 370 375 380
 Gln Phe His Thr Cys Thr Ile His Gly Pro Gln Leu Thr Phe Pro Lys
 385 390 395 400
 Asp Gln Leu Asp Glu Ala Trp Thr Asp Glu Arg Phe Pro Phe Gln Ala
 405 410 415
 Ser Val Glu Phe Val Phe Ser Ser Ser Pro Glu Lys Ile Lys Gly Ser
 420 425 430
 Thr Pro Arg Asn Asp Pro Ser Val Ser Val Asp Tyr Asn Thr Thr Glu
 435 440 445
 Pro Ala Val Arg Trp Asp Ser Tyr Glu Asn Phe Asn Gln His His Glu
 450 455 460
 Asp Ser Val Asp Gly Ser Leu Thr His Thr Arg Gly Pro Leu Asp Gly
 465 470 475 480

Ser Pro Tyr Ala Gln Val Gln Arg Pro Pro Arg Gln Thr Pro Pro Ala
 485 490 495
 Pro Ser Pro Glu Pro Pro Pro Pro Pro Met Leu Ser Val Ser Ser Asp
 500 505 510
 Ser Gly His Ser Ser Thr Leu Thr Thr Glu Pro Ala Ala Glu Ser Pro
 515 520 525
 Gly Arg Pro Pro Pro Thr Ala Ala Glu Arg Gln Glu Leu Asp Arg Leu
 530 535 540
 Leu Gly Gly Cys Gly Val Ala Ser Gly Gly Arg Gly Ala Gly Arg Glu
 545 550 555 560
 Thr Ala Ile Leu Asp Asp Glu Glu Gln Pro Thr Val Gly Gly Gly Pro
 565 570 575
 His Leu Gly Val Tyr Pro Gly His Arg Pro Gly Leu Ser Arg His Cys
 580 585 590
 Ser Cys Arg Gln Gly Tyr Arg Glu Pro Cys Gly Val Pro Asn Gly Gly
 595 600 605
 Tyr Tyr Arg Pro Glu Gly Thr Leu Glu Arg Arg Arg Leu Ala Tyr Gly
 610 615 620
 Gly Tyr Glu Gly Ser Pro Gln Gly Tyr Ala Glu Ala Ser Met Glu Lys
 625 630 635 640
 Arg Arg Leu Cys Arg Ser Leu Ser Glu Gly Leu Tyr Pro Tyr Pro Pro
 645 650 655
 Glu Met Gly Lys Pro Ala Thr Gly Asp Phe Gly Tyr Arg Ala Ser Ser
 660 665 670
 Ala Ala Leu Ser Cys Ser Pro Arg Pro Thr Pro Ala Val Val His Phe
 675 680 685
 Lys Val Ser Ala Gln Gly Ile Thr Leu Thr Asp Asn Gln Arg Lys Leu
 690 695 700
 Phe Phe Arg Arg His Tyr Pro Val Asn Ser Ile Thr Phe Ser Ser Thr
 705 710 715 720
 Asp Pro Gln Asp Arg Arg Trp Thr Asn Pro Asp Gly Thr Thr Ser Lys
 725 730 735
 Ile Phe Gly Phe Val Ala Lys Lys Pro Gly Ser Pro Trp Glu Asn Val
 740 745 750
 Cys His Leu Phe Ala Glu Leu Asp Pro Asp Gln Pro Ala Gly Ala Ile

755 760 765
 Val Thr Phe Ile Thr Lys Val Leu Leu Gly Gln Arg Lys
 770 775 780

<210> 4863

<211> 114

<212> PRT

<213> Homo sapiens

<400> 486

Met Ile Lys Glu Leu Thr Gln Asn Leu Asn Thr Phe Phe Ile Glu Phe
 1 5 10 15
 Ile Tyr Gly Cys Leu Leu Phe Val Glu Phe Phe Ser Ser Leu Phe Ser
 20 25 30
 Phe Phe Phe Ser Phe Leu Ser Ser Leu Leu Phe Ser Phe Phe Ser Val
 35 40 45
 Ala Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro Pro
 50 55 60
 Pro Pro Arg Phe Lys His Leu Ser Cys Leu Ser Leu Pro Ser Ser Trp
 65 70 75 80
 Asp Tyr Arg Cys Pro Pro Pro Ser Pro Ala Asn Phe Cys Ile Phe Ser
 85 90 95
 Arg Asp Arg Val Ser Pro Cys Trp Leu Gly Trp Ser Arg Thr Ser Asp
 100 105 110
 Leu Lys

<210> 4864

<211> 141

<212> PRT

<213> Homo sapiens

<400> 487

Met Pro Val Ile Pro Ala Leu Gly Glu Ala Lys Gly Glu Val Leu Pro

1	5	10	15
Pro Gly Asp Thr Thr Thr Ile Ile Pro Leu Asn Trp Met Leu Lys Ser			
20	25	30	
Pro Pro Gly His Phe Gly Leu Leu Leu Leu Ser Gln Gln Ala Lys			
35	40	45	
Asn Gly Val Met Val Leu Ala Gly Val Thr Asp Pro Glu Tyr Gln Asp			
50	55	60	
Glu Ile Ser Leu Leu Leu His Asn Glu Gly His Leu Lys Glu Val Lys			
65	70	75	80
Met Glu Gly Ala Arg Leu Gly Leu Pro Gly Arg Ala Glu Ser Leu Glu			
85	90	95	
His Gln Val Gln Ser His Leu Asn Met Ile Ala Gln Ser Gln Arg Thr			
100	105	110	
Phe Gln Lys Lys Asp Ala Gly Lys Ala Ile Ile Leu Ser Lys Leu Thr			
115	120	125	
Gln Glu Gln Lys Thr Lys His Cys Met Phe Ser Leu His			
130	135	140	

<210> 4865

<211> 731

<212> PRT

<213> Homo sapiens

<400> 488

Met His Leu Arg Leu Arg Pro Glu Val Gly Arg Ser Arg Ala Arg Ser			
1	5	10	15
Gly Glu Pro Ala Gly Ser Ala Ala Ala Arg Glu Val Met Ala Ala Ala			
20	25	30	
Pro Ala Arg Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Cys Ser			
35	40	45	
Gly Ser Gly Ser Ser Ala Ser Arg Gly Phe Tyr Phe Asn Thr Val Leu			
50	55	60	
Ser Leu Ala Arg Ser Leu Ala Val Gln Arg Pro Ala Ser Leu Glu Lys			
65	70	75	80
Val Arg Lys Leu Leu Cys Met Cys Pro Val Asp Phe His Gly Ile Phe			

	85	90	95
Gln Leu Asp Glu Arg Arg Arg Asp Ala Val Ile Ala Leu Gly Ile Phe			
100	105	110	
Leu Ile Glu Ser Asp Leu Gln His Lys Asp Cys Val Val Pro Tyr Leu			
115	120	125	
Leu Arg Leu Leu Lys Gly Leu Pro Lys Val Tyr Trp Val Glu Glu Ser			
130	135	140	
Thr Ala Arg Lys Gly Arg Gly Ala Leu Pro Val Ala Glu Ser Phe Ser			
145	150	155	160
Phe Cys Leu Val Thr Leu Leu Ser Asp Val Ala Tyr Arg Asp Pro Ser			
165	170	175	
Leu Arg Asp Glu Ile Leu Glu Val Leu Leu Gln Val Leu His Val Leu			
180	185	190	
Leu Gly Met Cys Gln Ala Leu Glu Ile Gln Asp Lys Glu Tyr Leu Cys			
195	200	205	
Lys Tyr Ala Ile Pro Cys Leu Ile Gly Ile Ser Arg Ala Phe Gly Arg			
210	215	220	
Tyr Ser Asn Met Glu Glu Ser Leu Leu Ser Lys Leu Phe Pro Lys Ile			
225	230	235	240
Pro Pro His Ser Leu Arg Val Leu Glu Glu Leu Glu Gly Val Arg Arg			
245	250	255	
Arg Ser Phe Asn Asp Phe Arg Ser Ile Leu Pro Ser Asn Leu Leu Thr			
260	265	270	
Val Cys Gln Glu Gly Thr Leu Lys Arg Lys Thr Ser Ser Val Ser Ser			
275	280	285	
Ile Ser Gln Val Ser Pro Glu Arg Gly Met Pro Pro Pro Ser Ser Pro			
290	295	300	
Gly Gly Ser Ala Phe His Tyr Phe Glu Ala Ser Cys Leu Pro Asp Gly			
305	310	315	320
Thr Ala Leu Glu Pro Glu Tyr Tyr Phe Ser Thr Ile Ser Ser Ser Phe			
325	330	335	
Ser Val Ser Pro Leu Phe Asn Gly Val Thr Tyr Lys Glu Phe Asn Ile			
340	345	350	
Pro Leu Glu Met Leu Arg Glu Leu Leu Asn Leu Val Lys Lys Ile Val			
355	360	365	
Glu Glu Ala Val Leu Lys Ser Leu Asp Ala Ile Val Ala Ser Val Met			

370	375	380	
Glu Ala Asn Pro Ser Ala Asp Leu Tyr Tyr Thr Ser Phe Ser Asp Pro			
385	390	395	400
Leu Tyr Leu Thr Met Phe Lys Met Leu Arg Asp Thr Leu Tyr Tyr Met			
	405	410	415
Lys Asp Leu Pro Thr Ser Phe Val Lys Glu Ile His Asp Phe Val Leu			
	420	425	430
Glu Gln Phe Asn Thr Ser Gln Gly Glu Leu Gln Lys Ile Leu His Asp			
	435	440	445
Ala Asp Arg Ile His Asn Glu Leu Ser Pro Leu Lys Leu Arg Cys Gln			
	450	455	460
Ala Asn Ala Ala Cys Val Asp Leu Met Val Trp Ala Val Lys Asp Glu			
465	470	475	480
Gln Gly Ala Glu Asn Leu Cys Ile Lys Leu Ser Glu Lys Leu Gln Ser			
	485	490	495
Lys Thr Ser Ser Lys Val Ile Ile Ala His Leu Pro Leu Leu Ile Cys			
	500	505	510
Cys Leu Gln Gly Leu Gly Arg Leu Cys Glu Arg Phe Pro Val Val Val			
	515	520	525
His Ser Val Thr Pro Ser Leu Arg Asp Phe Leu Val Ile Pro Ser Pro			
	530	535	540
Val Leu Val Lys Leu Tyr Lys Tyr His Ser Gln Tyr His Thr Val Ala			
545	550	555	560
Gly Asn Asp Ile Lys Ile Ser Val Thr Asn Glu His Ser Glu Ser Thr			
	565	570	575
Leu Asn Val Met Ser Gly Lys Lys Ser Gln Pro Ser Met Tyr Glu Gln			
	580	585	590
Leu Arg Asp Ile Ala Ile Asp Asn Ile Cys Arg Cys Leu Lys Ala Gly			
	595	600	605
Leu Thr Val Asp Pro Val Ile Val Glu Ala Phe Leu Ala Ser Leu Ser			
	610	615	620
Asn Arg Leu Tyr Ile Ser Gln Glu Ser Asp Lys Asp Ala His Leu Ile			
625	630	635	640
Pro Asp His Thr Ile Arg Ala Leu Gly His Ile Ala Val Ala Leu Arg			
	645	650	655
Asp Thr Pro Lys Val Met Glu Pro Ile Leu Gln Ile Leu Gln Gln Lys			

660 665 670
 Phe Cys Gln Pro Pro Ser Pro Leu Asp Val Leu Ile Ile Asp Gln Leu
 675 680 685
 Gly Cys Leu Val Ile Thr Gly Asn Gln Tyr Ile Tyr Gln Glu Val Trp
 690 695 700
 Asn Leu Phe Gln Gln Ile Ser Val Lys Ala Ser Ser Val Val Tyr Ser
 705 710 715 720
 Ala Thr Lys Asp Tyr Lys Asp His Gly Tyr Arg
 725 730

<210> 4866

<211> 288

<212> PRT

<213> Homo sapiens

<400> 489

Met Ser Arg Glu Leu Ala Pro Leu Leu Leu Leu Leu Ser Ile His
 1 5 10 15
 Ser Ala Leu Ala Met Arg Ile Cys Ser Phe Asn Val Arg Ser Phe Gly
 20 25 30
 Glu Ser Lys Gln Glu Asp Lys Asn Ala Met Asp Val Ile Val Lys Val
 35 40 45
 Ile Lys Arg Cys Asp Ile Ile Leu Val Met Glu Ile Lys Asp Ser Asn
 50 55 60
 Asn Arg Ile Cys Pro Ile Leu Met Glu Lys Leu Asn Arg Asn Ser Arg
 65 70 75 80
 Arg Gly Ile Thr Tyr Asn Tyr Val Ile Ser Ser Arg Leu Gly Arg Asn
 85 90 95
 Thr Tyr Lys Glu Gln Tyr Ala Phe Leu Tyr Lys Glu Lys Leu Val Ser
 100 105 110
 Val Lys Arg Ser Tyr His Tyr His Asp Tyr Gln Asp Gly Asp Ala Asp
 115 120 125
 Val Phe Ser Arg Glu Pro Phe Val Val Trp Phe Gln Ser Pro His Thr
 130 135 140
 Ala Val Lys Asp Phe Val Ile Ile Pro Leu His Thr Thr Pro Glu Thr

145 150 155 160
 Ser Val Lys Glu Ile Asp Glu Leu Val Glu Val Tyr Thr Asp Val Lys

 165 170 175
 His Arg Trp Lys Ala Glu Asn Phe Ile Phe Met Gly Asp Phe Asn Ala

 180 185 190
 Gly Cys Ser Tyr Val Pro Lys Lys Ala Trp Lys Asn Val Arg Leu Arg

 195 200 205
 Thr Asp Pro Arg Phe Val Trp Leu Ile Gly Asp Gln Glu Asp Thr Thr

 210 215 220
 Val Lys Lys Ser Thr Asn Cys Ala Tyr Asp Arg Ile Val Leu Arg Gly

225 230 235 240
 Gln Glu Ile Val Ser Ser Val Val Pro Lys Ser Asn Ser Val Phe Asp

 245 250 255
 Phe Gln Lys Ala Tyr Lys Leu Thr Glu Glu Glu Val Arg Leu Pro Ser

 260 265 270
 Cys Leu Ser Met Pro Leu Ser Trp Lys Asp Glu Leu Ala Trp Ala Thr

 275 280 285

<210> 4867

<211> 143

<212> PRT

<213> Homo sapiens

<400> 490

Met Pro Ser Thr Pro Ser Ser Arg Arg Ser Arg Asn Ser Ser Arg Ser
 1 5 10 15

Pro Pro Gln Thr Ala Asp Cys Trp Ala Ser Ser Lys Ala Arg Thr Pro
 20 25 30

Ser Ser Thr Glu Leu Gln Pro Cys Leu Glu Gly Arg Pro Pro Ser Cys
 35 40 45

His Pro Asp Leu Ser Gly Ser Pro Phe Pro Pro Ser Leu Asp Pro Lys
 50 55 60

Ser Gly Ala Ile His Gln Glu Cys Arg Pro Leu Val Gly Gly Ala Gly
 65 70 75 80

Cys Cys Leu Pro Ile Gly Gln Leu Leu Pro Glu Met Gln Met Arg Leu
 85 90 95
 Leu Glu Thr Gly Trp Glu Leu Ala Glu Pro Arg Trp Arg Arg Gly Ser
 100 105 110
 Ala Pro Gly His Phe Thr Gly Arg Glu Gly Glu Gly Lys Lys Ser Leu
 115 120 125
 Arg Leu Trp Asp Thr Asp Ser Gln Asn Lys His Ile Cys Gly Cys
 130 135 140

<210> 4868

<211> 281

<212> PRT

<213> Homo sapiens

<400> 491

Met Ala Val Asp Ser Leu Leu Arg Ile Leu Lys Thr Leu Arg Leu Asp
 1 5 10 15
 Phe Ile Gln Glu Leu Glu Val Phe Tyr Trp Cys Arg Asp Phe Leu Val
 20 25 30
 Leu Ala Glu Pro Asn Leu Ser Ala Ile Gln Leu Gly Arg Ile Phe Asn
 35 40 45
 Leu Arg Ser Leu Lys Leu Phe Tyr Tyr Lys Trp Ala Phe Ser Ser Trp
 50 55 60
 Val Arg Arg Pro Ser Ser Tyr Phe Phe Ser Gln Leu Thr Met Leu Gly
 65 70 75 80
 His Leu Arg Lys Leu His Leu Ser His Ser Tyr Leu Val Gly Lys Leu
 85 90 95
 His Tyr Ile Leu Ser Cys Leu Trp Val Pro Leu His Ser Leu Glu Ile
 100 105 110
 Cys Asn Cys Lys Leu Leu Asp Thr Asp Ile Thr Tyr Leu Ser Arg Ser
 115 120 125
 His His Thr Thr Cys Leu Lys Lys Leu Asp Leu Ser Val Asn Asp Leu
 130 135 140
 Ser Tyr Met Ile Pro Gly Pro Leu Gly Thr Leu Leu Arg Ala Val Ser
 145 150 155 160

Gly Thr Leu Gln His Leu Asp Leu Lys His Cys Trp Leu Lys Asp Ala
 165 170 175
 His Leu Ser Ala Leu Leu Pro Ala Leu Cys Arg Cys Ser His Leu Ser
 180 185 190
 Ser Leu Ser Leu Ser Asp Asn Pro Ile Ser Ser Ala Cys Leu Leu Ser
 195 200 205
 Leu Leu Glu His Thr Met Gly Leu Met Glu Leu Lys Gln Val Leu Tyr
 210 215 220
 Pro Ile Pro Val Asp Cys Cys Ile Tyr Leu His Gly Val Cys Arg Gly
 225 230 235 240
 Pro Val Asn Glu Asp Lys Leu Cys Gln Leu Gln Ala Glu Ile Gln Lys
 245 250 255
 Gln Leu Gln Ala Met Gln Gln Ala Asp Met Gln Trp Ser Pro Ser Thr
 260 265 270
 Val Phe Ala Tyr Ala Ala Gly Ala Val
 275 280

<210> 4869

<211> 197

<212> PRT

<213> Homo sapiens

<400> 492

Met Val Gln Ala Pro Cys Leu Val Val Leu Ser Phe His Val Val Leu
 1 5 10 15
 Ser Leu Gln Val His Arg Ser Gln Glu Leu Gly Phe Trp Asn Leu His
 20 25 30
 Leu Asp Phe Arg Arg Cys Met Glu Met Pro Gly Cys Pro Gly Arg Asn
 35 40 45
 Leu Leu Gln Gly Trp Gly Ser His Gly Glu Pro Leu Leu Gly Gln Cys
 50 55 60
 Arg Arg Glu Met Trp Gly Gly Ser Pro Thr Gln Ser Pro Tyr Trp Gly
 65 70 75 80
 Thr Val Leu Gln Thr Gln Asn Gly Arg Ser Thr Asp Ser Leu His Cys
 85 90 95

Val Pro Gly Lys Ala Thr Asp Thr Gln Cys Gln Pro Met Lys Ala Thr
 100 105 110
 Arg Arg Glu Thr Val Pro Cys Lys Ala Thr Gly Ala Glu Leu Leu Lys
 115 120 125
 Thr Met Gly Thr Tyr Leu Leu Tyr Gln His Asp Leu Asp Val Arg His
 130 135 140
 Gly Val Lys Gly Glu His Phe Gly Ala Leu Arg Phe Asp Cys Pro Ala
 145 150 155 160
 Gly Phe Trp Thr Cys Met Gly Pro Val Ala Pro Leu Phe Trp Pro Val
 165 170 175
 Ser Pro Ile Trp Asn Gly Tyr Ile Tyr Pro Met Pro Ile Pro Pro Leu
 180 185 190
 Tyr Pro Gly Ser Asn
 195

<210> 4870

<211> 218

<212> PRT

<213> Homo sapiens

<400> 493

Met Trp Leu His Arg Gly Pro Leu Arg Pro Pro Gly Val Arg Trp Thr
 1 5 10 15
 Pro Trp Ala Phe Leu Glu Ala Cys Ser Trp Gly Pro Ala Leu Ser Leu
 20 25 30
 Leu Gly Ser Gly His Ser Leu Pro Gly Thr His Glu Gln Ala Ala Trp
 35 40 45
 Ser Arg Gly Cys Gly Gln His Gly Gln Ser Pro Thr Gln Lys Cys Lys
 50 55 60
 Ser Ser Lys Glu Pro Leu Ala Gln Ala Pro Pro His Gln Gly Phe Ala
 65 70 75 80
 Asp Val Leu Glu Arg Pro Thr Leu Glu Pro Phe Gly Val Leu Ala Pro
 85 90 95
 Pro Val Pro Ser Ala Leu Val Glu Ala Ala Ala Thr Ser Pro Pro Gln
 100 105 110

Gly Ala Pro Arg Gly Ile Leu Trp Asp Arg Cys Pro Gln Ile Gln Val
 115 120 125
 Leu Glu Gly Gln Arg Val Arg Phe Pro Ser Gln Pro Gln His Pro Ser
 130 135 140
 His Leu Ala Pro Arg Gly Gly Cys Gly Trp Arg Pro Asp Ser Arg Pro
 145 150 155 160
 Leu Leu Pro Thr Pro Ser Gly Leu Ser Ser Phe Phe Pro Leu Asp Ala
 165 170 175
 Gln Cys Trp Pro Trp Arg Thr Val Ser Trp Arg Met Ala Val Gly Glu
 180 185 190
 Ala Val Phe Val Pro Leu Gln His Pro Pro Leu Leu His Gly Ser Pro
 195 200 205
 Ile Pro Lys Leu Leu Pro Gly Pro Leu Leu
 210 215

<210> 4871

<211> 349

<212> PRT

<213> Homo sapiens

<400> 494

Met Ala Met Ala Phe Thr Asp Leu Leu Asp Ala Leu Gly Ser Met Gly
 1 5 10 15
 Arg Phe Gln Leu Asn His Thr Ala Leu Leu Leu Leu Pro Cys Gly Leu
 20 25 30
 Leu Ala Cys His Asn Phe Leu Gln Asn Phe Thr Ala Ala Val Pro Pro
 35 40 45
 His His Cys Arg Gly Pro Ala Asn His Thr Glu Ala Ser Thr Asn Asp
 50 55 60
 Ser Gly Ala Trp Leu Arg Ala Thr Ile Pro Leu Asp Gln Leu Gly Ala
 65 70 75 80
 Pro Glu Pro Cys Arg Arg Phe Thr Lys Pro Gln Trp Ala Leu Leu Ser
 85 90 95
 Pro Asn Ser Ser Ile Pro Gly Ala Ala Thr Glu Gly Cys Lys Asp Gly
 100 105 110

Trp Val Tyr Asn Arg Ser Val Phe Pro Ser Thr Ile Val Met Glu Trp
 115 120 125
 Asp Leu Val Cys Glu Ala Arg Thr Leu Arg Asp Leu Ala Gln Ser Val
 130 135 140
 Tyr Met Ala Gly Val Leu Val Gly Ala Ala Val Phe Gly Ser Leu Ala
 145 150 155 160
 Asp Arg Leu Gly Cys Lys Gly Pro Leu Val Trp Ser Tyr Leu Gln Leu
 165 170 175
 Ala Ala Ser Gly Ala Ala Thr Ala Tyr Phe Ser Ser Phe Ser Ala Tyr
 180 185 190
 Cys Val Phe Arg Phe Leu Met Gly Met Thr Phe Ser Gly Ile Ile Leu
 195 200 205
 Asn Ser Val Ser Leu Val Ala Ser Arg Val Ile Pro Leu Ala Pro Pro
 210 215 220
 Ala Trp Gln Val Pro Val Ser Cys Thr Glu Ser Ala Glu Gly Gly Cys
 225 230 235 240
 Asn Glu Arg Glu Glu Gly Gly Arg Gly Lys Ala Asp Gln Gly Gly Asp
 245 250 255
 Glu Leu Leu His Pro Lys Arg Val Cys Lys Cys Leu His Leu Gln Leu
 260 265 270
 Asn Leu Gly Pro Leu Pro Asn Pro Gly His Pro Gln Gly His Met Leu
 275 280 285
 Ser His Gly Asp Leu Arg Gly Arg Gln Arg Ser Ser Gly Ser Gly Glu
 290 295 300
 Gln Gly Gly Ser Cys Glu Pro Glu Ser Arg Asn Gly Arg Leu Pro Ala
 305 310 315 320
 Val Ala Pro Ala Gly Leu Gly Leu Pro Phe Val His Leu Pro Leu Ser
 325 330 335
 Ala Arg Glu Lys Gln Ile Leu Ser Ser Lys Phe Gln Ser
 340 345

<210> 4872

<211> 421

<212> PRT

<213> Homo sapiens

<400> 495

Met Arg Tyr Ser Leu Ser Pro Asp Asn His Leu Glu Asp Gly Ile Met
 1 5 10 15
 Asn Met Ala Asn Phe Leu Arg Gly Phe Glu Glu Lys Gly Ile Lys Asn
 20 25 30
 Asp Arg Pro Glu Asp Gln Leu Ser Lys Glu Lys Lys Lys Ile Leu Phe
 35 40 45
 Ser Phe Cys Glu Val Cys Asn Ile Gln Leu Asn Ser Ala Ala Gln Ala
 50 55 60
 Gln Val His Ser Asn Gly Lys Ser His Arg Lys Arg Val Lys Gln Leu
 65 70 75 80
 Ser Asp Gly Gln Pro Pro Pro Pro Ala Gln Ala Ser Pro Ser Ser Asn
 85 90 95
 Ser Ser Thr Gly Ser Thr Cys His Thr Thr Thr Leu Pro Ala Leu Val
 100 105 110
 Arg Thr Pro Thr Leu Met Met Gln Pro Ser Leu Asp Ile Lys Pro Phe
 115 120 125
 Met Ser Phe Pro Val Asp Ser Ser Ser Ala Val Gly Leu Phe Pro Asn
 130 135 140
 Phe Asn Thr Met Asp Pro Val Gln Lys Ala Val Ile Asn His Thr Phe
 145 150 155 160
 Gly Val Ser Ile Pro Pro Lys Lys Lys Gln Val Ile Ser Cys Asn Val
 165 170 175
 Cys Gln Leu Arg Phe Asn Ser Asp Ser Gln Ala Glu Ala His Tyr Lys
 180 185 190
 Gly Ser Lys His Ala Lys Lys Val Lys Ala Leu Asp Ala Thr Lys Asn
 195 200 205
 Lys Pro Lys Met Val Pro Ser Lys Asp Ser Ala Lys Ala Asn Pro Ser
 210 215 220
 Cys Ser Ile Thr Pro Ile Thr Gly Asn Asn Ser Asp Lys Ser Glu Asp
 225 230 235 240
 Lys Gly Lys Leu Lys Ala Ser Ser Ser Ser Gln Pro Ser Ser Ser Glu
 245 250 255
 Ser Gly Ser Phe Leu Leu Lys Ser Gly Thr Thr Pro Leu Pro Pro Gly

260 265 270
 Ala Ala Thr Ser Pro Ser Lys Ser Thr Asn Gly Ala Pro Gly Thr Val
 275 280 285
 Val Glu Ser Glu Glu Glu Lys Ala Lys Lys Leu Leu Tyr Cys Ser Leu
 290 295 300
 Cys Lys Val Ala Val Asn Ser Leu Ser Gln Leu Glu Ala His Asn Thr
 305 310 315 320
 Gly Ser Lys His Lys Thr Met Val Glu Ala Arg Asn Gly Ala Gly Pro
 325 330 335
 Ile Lys Ser Tyr Pro Arg Pro Gly Ser Arg Leu Lys Met Gln Asn Gly
 340 345 350
 Ser Lys Gly Ser Gly Leu Gln Asn Lys Thr Phe His Cys Glu Ile Cys
 355 360 365
 Asp Val His Val Asn Ser Glu Ile Gln Leu Lys Gln His Ile Ser Ser
 370 375 380
 Arg Arg His Lys Asp Arg Val Ala Gly Lys Pro Leu Lys Pro Lys Tyr
 385 390 395 400
 Thr Pro Cys Lys Val Ile Gly Leu Leu Pro Lys Pro Leu Pro Pro Ala
 405 410 415
 Asn Arg Gln Leu Ser
 420

<210> 4873

<211> 277

<212> PRT

<213> Homo sapiens

<400> 496

Met Gly Lys Asn Leu Lys Gly Ile Leu Thr Thr Glu Asn Ile Leu Ser
 1 5 10 15
 Ile Asp Asn Ser Val Asn Lys Lys Asp Leu Ser Ile Cys Gly Ser Ser
 20 25 30
 Gly Glu Glu Phe Phe Asn Asn Cys Glu Val Leu Gln Cys Gly Phe Ser
 35 40 45
 Val Pro Arg Glu Asn Ile Arg Thr Arg His Lys Ile Cys Pro Cys Asp

50	55	60	
Lys Cys Glu Lys Val Phe Pro Ser Ile Ser Lys Leu Lys Arg His Tyr			
65	70	75	80
Leu Ile His Thr Gly Gln Arg Pro Phe Gly Cys Asn Ile Cys Gly Lys			
	85	90	95
Ser Phe Arg Gln Ser Ala His Leu Lys Arg His Glu Gln Thr His Asn			
	100	105	110
Glu Lys Ser Pro Tyr Ala Ser Leu Cys Gln Val Glu Phe Gly Asn Phe			
	115	120	125
Asn Asn Leu Ser Asn His Ser Gly Asn Asn Val Asn Tyr Asn Ala Ser			
	130	135	140
Gln Gln Cys Gln Ala Pro Gly Val Gln Lys Tyr Glu Val Ser Glu Ser			
	145	150	155
Asp Gln Met Ser Gly Val Lys Ala Glu Ser Gln Asp Phe Ile Pro Gly			
	165	170	175
Ser Thr Gly Gln Pro Cys Leu Pro Asn Val Leu Leu Glu Ser Glu Gln			
	180	185	190
Ser Asn Pro Phe Cys Ser Tyr Ser Glu His Gln Glu Lys Asn Asp Val			
	195	200	205
Phe Leu Tyr Arg Cys Ser Val Cys Ala Lys Ser Phe Arg Ser Pro Ser			
	210	215	220
Lys Leu Glu Arg His Tyr Leu Ile His Ala Gly Gln Lys Pro Phe Glu			
	225	230	235
Cys Ser Val Cys Gly Lys Thr Phe Arg Gln Ala Pro His Trp Lys Arg			
	245	250	255
His Gln Leu Thr His Phe Lys Glu Arg Pro Gln Gly Lys Val Val Ala			
	260	265	270
Leu Asp Ser Val Met			
	275		

<210> 4874

<211> 933

<212> PRT

<213> Homo sapiens

<400> 497

Met Ala Trp Lys Thr Leu Pro Ile Tyr Leu Leu Leu Leu Ser Val
 1 5 10 15
 Phe Val Ile Gln Gln Val Ser Ser Gln Glu Leu Ser Cys Lys Gly Arg
 20 25 30
 Cys Phe Glu Ser Phe Glu Arg Gly Arg Glu Cys Asp Cys Asp Ala Gln
 35 40 45
 Cys Lys Lys Tyr Asp Lys Cys Cys Pro Asp Tyr Glu Ser Phe Cys Ala
 50 55 60
 Glu Val His Asn Pro Thr Ser Pro Pro Ser Ser Lys Lys Ala Pro Pro
 65 70 75 80
 Pro Ser Gly Ala Ser Gln Thr Ile Lys Ser Thr Thr Lys Arg Ser Pro
 85 90 95
 Lys Pro Pro Asn Lys Lys Lys Thr Lys Lys Val Ile Glu Ser Glu Glu
 100 105 110
 Ile Thr Glu Glu His Ser Val Ser Glu Asn Gln Glu Ser Ser Ser Ser
 115 120 125
 Ser Ser Ser Ser Ser Ser Ser Ser Thr Ile Arg Lys Ile Lys Ser Ser
 130 135 140
 Lys Asn Ser Ala Ala Asn Arg Glu Leu Gln Lys Lys Leu Lys Val Lys
 145 150 155 160
 Asp Asn Lys Lys Asn Arg Thr Lys Lys Lys Pro Thr Pro Lys Pro Pro
 165 170 175
 Val Val Asp Glu Ala Gly Ser Gly Leu Asp Asn Gly Asp Phe Lys Val
 180 185 190
 Thr Thr Pro Asp Thr Ser Thr Thr Gln His Asn Lys Val Ser Thr Ser
 195 200 205
 Pro Lys Ile Thr Thr Ala Lys Pro Ile Asn Pro Arg Pro Ser Leu Pro
 210 215 220
 Pro Asn Ser Asp Thr Ser Lys Glu Thr Ser Leu Thr Val Asn Lys Glu
 225 230 235 240
 Thr Thr Val Glu Thr Lys Glu Thr Thr Thr Thr Asn Lys Gln Thr Ser
 245 250 255
 Thr Asp Gly Lys Glu Lys Thr Thr Ser Ala Lys Glu Thr Gln Ser Ile
 260 265 270
 Glu Lys Thr Ser Ala Lys Asp Leu Ala Pro Thr Ser Lys Val Leu Ala

275	280	285
Lys Pro Thr Pro Lys Ala Glu Thr Thr Thr Lys Gly Pro Ala Leu Thr		
290	295	300
Thr Pro Lys Glu Pro Thr Pro Thr Thr Pro Lys Glu Pro Ala Ser Thr		
305	310	315
Thr Pro Lys Glu Pro Thr Pro Thr Thr Thr Ile Lys Ser Ala Pro Thr Thr		
325	330	335
Pro Lys Glu Pro Ala Pro Thr Thr Thr Lys Ser Ala Pro Thr Thr Pro		
340	345	350
Lys Glu Pro Ala Pro Thr Thr Thr Lys Glu Pro Ala Pro Thr Thr Pro		
355	360	365
Lys Glu Pro Ala Pro Thr Thr Pro Glu Thr Pro Pro Pro Thr Thr Ser		
370	375	380
Glu Val Ser Thr Pro Thr Thr Thr Lys Glu Pro Thr Thr Thr Ile His Lys		
385	390	395
Ser Pro Asp Glu Ser Thr Pro Glu Leu Ser Ala Glu Pro Thr Pro Lys		
405	410	415
Ala Leu Glu Asn Ser Pro Lys Glu Pro Gly Val Pro Thr Thr Lys Thr		
420	425	430
Pro Ala Ala Thr Lys Pro Glu Met Thr Thr Thr Thr Ala Lys Asp Lys Thr		
435	440	445
Thr Glu Arg Asp Leu Arg Thr Thr Pro Glu Thr Thr Thr Thr Ala Ala Pro		
450	455	460
Lys Met Thr Lys Glu Thr Ala Thr Thr Thr Thr Glu Lys Thr Thr Glu Ser		
465	470	475
Lys Ile Thr Ala Thr Thr Thr Thr Gln Val Thr Ser Thr Thr Thr Gln Asp		
485	490	495
Thr Thr Pro Phe Lys Ile Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr Thr		
500	505	510
Lys Val Thr Thr Thr Thr Lys Lys Thr Thr Thr Thr Thr Thr Thr Thr Thr		
515	520	525
Lys Pro Glu Glu Thr Ala Lys Pro Lys Asp Arg Ala Thr Asn Ser Lys		
530	535	540
Ala Thr Thr Pro Lys Pro Gln Lys Pro Thr Lys Ala Pro Lys Lys Pro		
545	550	555
Thr Ser Thr Lys Lys Pro Lys Thr Met Pro Arg Val Arg Lys Pro Lys		

565	570	575
Thr Thr Pro Thr Pro Arg Lys Met Thr Ser Thr Met Pro Glu Leu Asn		
580	585	590
Pro Thr Ser Arg Ile Ala Glu Ala Met Leu Gln Thr Thr Thr Arg Pro		
595	600	605
Asn Gln Thr Pro Asn Ser Lys Leu Val Glu Val Asn Pro Lys Ser Glu		
610	615	620
Asp Ala Gly Gly Ala Glu Gly Glu Thr Pro His Met Leu Leu Arg Pro		
625	630	635
His Val Phe Met Pro Glu Val Thr Pro Asp Met Asp Tyr Leu Pro Arg		
645	650	655
Val Pro Asn Gln Gly Ile Ile Ile Asn Pro Met Leu Ser Asp Glu Thr		
660	665	670
Asn Ile Cys Asn Gly Lys Pro Val Asp Gly Leu Thr Thr Leu Arg Asn		
675	680	685
Gly Thr Leu Val Ala Phe Arg Gly His Tyr Phe Trp Met Leu Ser Pro		
690	695	700
Phe Ser Pro Pro Ser Pro Ala Arg Arg Ile Thr Glu Val Trp Gly Ile		
705	710	715
Pro Ser Pro Ile Asp Thr Val Phe Thr Arg Cys Asn Cys Glu Gly Lys		
725	730	735
Thr Phe Phe Phe Lys Asp Ser Gln Tyr Trp Arg Phe Thr Asn Asp Ile		
740	745	750
Lys Asp Ala Gly Tyr Pro Lys Pro Ile Phe Lys Gly Phe Gly Gly Leu		
755	760	765
Thr Gly Gln Ile Val Ala Ala Leu Ser Thr Ala Lys Tyr Lys Asn Trp		
770	775	780
Pro Glu Ser Val Tyr Phe Phe Lys Arg Gly Gly Ser Ile Gln Gln Tyr		
785	790	795
Ile Tyr Lys Gln Glu Pro Val Gln Lys Cys Pro Gly Arg Arg Pro Ala		
805	810	815
Leu Asn Tyr Pro Val Tyr Gly Glu Thr Thr Gln Val Arg Arg Arg Arg		
820	825	830
Phe Glu Arg Ala Ile Gly Pro Ser Gln Thr His Thr Ile Arg Ile Gln		
835	840	845

Tyr Ser Pro Ala Arg Leu Ala Tyr Gln Asp Lys Gly Val Leu His Asn
 850 855 860
 Glu Val Lys Val Ser Ile Leu Trp Arg Gly Leu Pro Asn Val Val Thr
 865 870 875 880
 Ser Ala Ile Ser Leu Pro Asn Ile Arg Lys Pro Asp Gly Tyr Asp Tyr
 885 890 895
 Tyr Ala Phe Ser Lys Asp Gln Tyr Tyr Asn Ile Asp Val Pro Ser Arg
 900 905 910
 Thr Ala Arg Ala Ile Thr Thr Arg Ser Gly Gln Thr Leu Ser Lys Val
 915 920 925
 Trp Tyr Asn Cys Pro
 930

<210> 4875

<211> 216

<212> PRT

<213> Homo sapiens

<400> 498

Met Arg Trp Trp His Arg Cys Gly Gln Pro Gly Thr Asp Val Val Leu
 1 5 10 15
 Thr Gly Lys Asn Leu Pro Arg Pro Thr Leu Ser Thr Pro Ala Glu Ser
 20 25 30
 Ser Gln Pro Gly Gln Gly Ala His Val Gly Pro Asn Ala His Ala Pro
 35 40 45
 His Ser Cys Gly Glu Leu Thr Ala Arg Pro Arg Gly Ala Arg Gly Ala
 50 55 60
 Gln Arg Pro Arg Ser Pro Leu Leu Arg Arg Ala His Ser Gln Ala Arg
 65 70 75 80
 Gly Arg Thr Trp Gly Pro Thr Pro Thr Leu Pro Thr Pro Ala Glu Ser
 85 90 95
 Ser Gln Pro Gly Gln Gly Ala His Val Gly Pro Asn Ala His Ala Pro
 100 105 110
 His Ser Cys Gly Glu Leu Thr Ala Arg Pro Gly Gly Ala Arg Gly Ala
 115 120 125

Gln Arg Pro His Ser Pro Leu Leu Arg Arg Ala His Ser Gln Ala Arg
 130 135 140
 Gly Arg Thr Trp Gly Pro Thr Phe Arg Asn Lys Ile Ile Val Tyr Ser
 145 150 155 160
 Phe Leu Phe Phe Leu Lys Ser Val Phe Leu Leu Arg Thr Pro Asp Val
 165 170 175
 Cys Gly Ser Glu Ala Gln Trp Ala Tyr Ser Tyr Leu Thr Trp Gln Thr
 180 185 190
 Trp Lys Trp Lys Leu Leu Cys Ile Thr Arg Ile Ser Arg Ala Ser Ala
 195 200 205
 Ser Cys Trp Pro Asp Arg Val Pro
 210 215

<210> 4876

<211> 904

<212> PRT

<213> Homo sapiens

<400> 499

Met Ala Glu Ala Leu Leu Ala Cys Cys Pro Gly Asp Gln Lys Pro Gly
 1 5 10 15
 Ile Leu Ala Arg Leu Lys Asp Ile Lys Ala Gln Trp Glu Glu Thr Val
 20 25 30
 Thr Tyr Met Thr His Cys His Ser Arg Ile Glu Trp Val Trp Leu His
 35 40 45
 Trp Ser Glu Tyr Leu Leu Ala Arg Asp Glu Phe Tyr Arg Trp Phe Gln
 50 55 60
 Lys Met Met Val Thr Leu Glu Pro His Ile Glu Leu Gln Leu Gly Leu
 65 70 75 80
 Lys Glu Lys Gln Trp Gln Leu Ser His Ala Gln Val Leu Leu His Asn
 85 90 95
 Val Asp Asn Gln Ala Val Leu Leu Asp Arg Leu Leu Glu Glu Ala Ala
 100 105 110
 Ser Leu Phe Asn Arg Ile Gly Asp Pro Ser Val Asp Glu Asp Ala Gln
 115 120 125

Lys Arg Met Lys Ala Glu Tyr Asp Ala Val Lys Ala Lys Ala Gln Lys
 130 135 140
 Arg Val Asp Leu Leu Glu Gln Val Ala Arg Glu His Glu Glu Tyr Gln
 145 150 155 160
 Ala Gly Val Asp Glu Phe Gln Leu Trp Leu Lys Ala Val Val Glu Lys
 165 170 175
 Val Asn Gly Cys Leu Gly Arg Asn Cys Lys Leu Pro Ile Thr Gln Arg
 180 185 190
 Leu Ser Thr Leu Gln Asp Ile Ala Lys Asp Phe Pro Arg Gly Glu Glu
 195 200 205
 Ser Leu Glu Thr Leu Glu Glu Gln Ser Ala Gly Val Ile Arg Asn Thr
 210 215 220
 Ser Pro Leu Gly Ala Glu Lys Ile Thr Gly Glu Leu Glu Glu Met Arg
 225 230 235 240
 Lys Val Leu Glu Lys Leu Arg Ala Leu Trp Glu Glu Glu Glu Glu Arg
 245 250 255
 Leu Arg Gly Leu Leu Arg Ser Arg Gly Ala Trp Glu Gln Gln Ile Lys
 260 265 270
 Gln Leu Glu Ala Glu Leu Ser Glu Phe Arg Met Val Leu Gln Arg Leu
 275 280 285
 Ala Gln Glu Gly Leu Gln Pro Ala Ala Lys Ala Gly Thr Glu Asp Glu
 290 295 300
 Leu Val Ala His Trp Arg Arg Tyr Ser Ala Thr Arg Ala Ala Leu Ala
 305 310 315 320
 Ser Glu Glu Pro Arg Val Asp Arg Leu Gln Ala Gln Leu Lys Glu Leu
 325 330 335
 Ile Val Phe Pro His Asn Leu Lys Pro Leu Ser Asp Ser Val Ile Ala
 340 345 350
 Thr Ile Gln Glu Tyr Gln Ser Leu Lys Val Lys Ser Ala Arg Leu Arg
 355 360 365
 Asn Ala Ala Ala Val Glu Leu Trp Gln His Phe Gln Arg Pro Leu Gln
 370 375 380
 Asp Leu Gln Leu Trp Lys Ala Leu Ala Gln Arg Leu Leu Glu Val Thr
 385 390 395 400
 Ala Ser Leu Pro Asp Leu Pro Ser Leu His Thr Phe Leu Pro Gln Ile
 405 410 415

Glu Ala Ala Leu Met Glu Ser Ser Arg Leu Lys Glu Leu Leu Thr Met
 420 425 430
 Leu Gln Leu Lys Lys Asp Leu Leu Ile Gly Ile Phe Gly Gln Glu Arg
 435 440 445
 Ala Thr Ala Leu Leu Glu Gln Val Ala Gly Ser Met Arg Asp Arg Asp
 450 455 460
 Leu Leu His Asn Ser Leu Leu Gln Arg Lys Ser Lys Leu Gln Ser Leu
 465 470 475 480
 Leu Ala Gln His Lys Asp Phe Gly Ala Ala Phe Glu Pro Leu Gln Arg
 485 490 495
 Lys Leu Leu Asp Leu Gln Val Arg Val Gln Ala Glu Lys Gly Leu Gln
 500 505 510
 Arg Asp Leu Pro Gly Lys Gln Ala Gln Leu Ser Arg Leu Gln Gly Leu
 515 520 525
 Gln Glu Glu Gly Leu Asp Leu Gly Ala Gln Met Glu Ala Ala Arg Pro
 530 535 540
 Leu Val Gln Glu Asn Pro Asn His Gln His Lys Met Asp Gln Leu Ser
 545 550 555 560
 Ser Asp Phe Gln Ala Leu Gln Arg Ser Leu Glu Asp Leu Val Asp Arg
 565 570 575
 Cys Arg Gln Ser Val Gln Glu His Cys Thr Phe Ser His Gln Leu Leu
 580 585 590
 Glu Leu Arg Gln Trp Ile Val Val Thr Met Gln Lys Leu Glu Ala His
 595 600 605
 Arg Gly Glu Ala Gly Pro Gly Asp Ala Glu Ser Gln Glu Ala Glu Phe
 610 615 620
 Glu Arg Leu Val Ala Glu Phe Pro Glu Lys Glu Ala Gln Leu Ser Leu
 625 630 635 640
 Val Glu Ala Gln Gly Trp Leu Val Met Glu Lys Ser Ser Pro Glu Gly
 645 650 655
 Ala Ala Val Val Gln Glu Glu Leu Arg Glu Leu Ala Glu Ser Trp Arg
 660 665 670
 Ala Leu Arg Leu Leu Glu Glu Ser Leu Leu Ser Leu Ile Arg Asn Trp
 675 680 685
 His Leu Gln Arg Met Glu Val Asp Ser Gly Lys Lys Met Val Phe Thr

690	695	700	
Asn Asn Ile Pro Lys Ser Gly Phe Leu Ile Asn Pro Met Asp Pro Ile			
705	710	715	720
Pro Arg His Arg Arg Arg Glu Glu Glu Gly Ser His Glu Asp Phe Ser			
	725	730	735
Gln Leu Leu Arg Asn Phe Gly Gln Trp Leu Gln Val Glu Asn Ser Lys			
	740	745	750
Leu Val Arg Ile Ile Ala Met Arg Thr Ser Thr Ala Glu Asp Leu Arg			
	755	760	765
Thr Arg Lys Ser Lys Leu Gln Glu Leu Glu Ala Arg Val Pro Glu Gly			
	770	775	780
Gln His Leu Phe Glu Asn Leu Leu Arg Leu Gly Pro Ala Arg Gly Thr			
785	790	795	800
Ser Asp Glu Leu Glu Asp Leu Arg Tyr Gln Trp Met Leu Tyr Lys Ser			
	805	810	815
Lys Leu Lys Asp Ser Gly His Leu Leu Thr Gln Ser Ser Pro Gly Glu			
	820	825	830
Pro Thr Gly Phe Gln Lys Thr Arg Arg Trp Arg Gly Leu Gly Ser Leu			
	835	840	845
Phe Arg Arg Ala Cys Cys Val Ala Leu Pro Leu Gln Leu Leu Leu Leu			
	850	855	860
Leu Phe Leu Leu Leu Leu Phe Leu Leu Pro Ile Arg Glu Glu Asp Arg			
865	870	875	880
Ser Cys Thr Leu Ala Asn Asn Phe Ala Arg Ser Phe Thr Leu Met Leu			
	885	890	895
Arg Tyr Asn Gly Pro Pro Pro Thr			
	900		

<210> 4877

<211> 164

<212> PRT

<213> Homo sapiens

<400> 500

Met Ser Glu Pro Ser Pro Cys Pro Pro Glu Gly Val Gln Leu Cys Gly

1	5	10	15												
Pro	Ala	Leu	Tyr	Arg	Leu	Val	Pro	Cys	Val	Cys	Ala	Val	Ser	Val	Cys
20	25	30													
Leu	Leu	Pro	Gln	Val	Leu	Lys	Lys	Tyr	Pro	Arg	Leu	Trp	Cys	Met	Thr
35	40	45													
Lys	Pro	Pro	Ser	Arg	Arg	Pro	Lys	Leu	Tyr	Ile	Val	Asn	Leu	Gln	Trp
50	55	60													
Thr	Pro	Lys	Asp	Asp	Trp	Ala	Ala	Leu	Lys	Leu	His	Gly	Lys	Cys	Asp
65	70	75	80												
Asp	Val	Met	Arg	Leu	Leu	Met	Ala	Glu	Leu	Gly	Leu	Glu	Ile	Pro	Ala
85	90	95													
Tyr	Ser	Arg	Trp	Gln	Asp	Pro	Ile	Phe	Ser	Leu	Ala	Thr	Pro	Leu	Arg
100	105	110													
Ala	Gly	Glu	Glu	Gly	Ser	His	Ser	Arg	Lys	Ser	Leu	Cys	Arg	Ser	Arg
115	120	125													
Glu	Glu	Ala	Pro	Pro	Gly	Asp	Arg	Gly	Ala	Pro	Leu	Ser	Ser	Ala	Pro
130	135	140													
Ile	Leu	Gly	Gly	Trp	Phe	Gly	Arg	Gly	Cys	Thr	Lys	Arg	Thr	Lys	Arg
145	150	155	160												
Lys	Lys	Val	Thr												

<210> 4878

<211> 477

<212> PRT

<213> Homo sapiens

<400> 501

Met	Lys	Leu	Ile	Arg	Ser	Ser	Ser	Cys	His	Val	Gly	Ser	Ala	Arg	Lys
1	5	10	15												
Leu	His	His	Trp	Arg	Ala	Gly	Gln	Thr	Glu	Pro	Gly	Trp	Ala	Gly	Thr
20	25	30													
Arg	His	Asp	Ser	Pro	Val	Pro	Leu	Pro	Pro	Arg	Gly	Gly	Leu	Ala	Ala
35	40	45													
Asp	Asn	Val	Leu	Leu	Ser	Ser	Asp	Gly	Ser	His	Ala	Ala	Leu	Cys	Asp

50	55	60
Phe Gly His Ala Val Cys Leu Gln Pro Asp Gly Leu Gly Lys Ser Leu		
65	70	75
Leu Thr Gly Asp Tyr Ile Pro Gly Thr Glu Thr His Met Ala Pro Glu		
85	90	95
Val Val Leu Gly Arg Ser Cys Asp Ala Lys Val Asp Val Trp Ser Ser		
100	105	110
Cys Cys Met Met Leu His Met Leu Asn Gly Cys His Pro Trp Thr Gln		
115	120	125
Phe Phe Arg Gly Pro Leu Cys Leu Lys Ile Ala Ser Glu Pro Pro Pro		
130	135	140
Val Arg Glu Ile Pro Pro Ser Cys Ala Pro Leu Thr Ala Gln Ala Ile		
145	150	155
Gln Glu Gly Leu Arg Lys Glu Pro Ile His Arg Val Ser Ala Ala Glu		
165	170	175
Leu Gly Gly Lys Val Asn Arg Ala Leu Gln Gln Val Gly Gly Leu Lys		
180	185	190
Ser Pro Trp Arg Gly Glu Tyr Lys Glu Pro Arg His Pro Pro Pro Asn		
195	200	205
Gln Ala Asn Tyr His Gln Thr Leu His Ala Gln Pro Arg Glu Leu Ser		
210	215	220
Pro Arg Ala Pro Gly Pro Arg Pro Ala Glu Glu Thr Thr Gly Arg Ala		
225	230	235
Pro Lys Leu Gln Pro Pro Leu Pro Pro Glu Pro Pro Glu Pro Asn Lys		
245	250	255
Ser Pro Pro Leu Thr Leu Ser Lys Glu Glu Ser Gly Met Trp Glu Pro		
260	265	270
Leu Pro Leu Ser Ser Leu Glu Pro Ala Pro Ala Arg Asn Pro Ser Ser		
275	280	285
Pro Glu Arg Lys Ala Thr Val Pro Glu Gln Glu Leu Gln Gln Leu Glu		
290	295	300
Ile Glu Leu Phe Leu Asn Ser Leu Ser Gln Pro Phe Ser Leu Glu Glu		
305	310	315
Gln Glu Gln Ile Leu Ser Cys Leu Ser Ile Asp Ser Leu Ser Leu Ser		
325	330	335
Asp Asp Ser Glu Lys Asn Pro Ser Lys Ala Ser Gln Ser Ser Arg Asp		

340	345	350	
Thr Leu Ser Ser Gly Val His Ser Trp Ser Ser Gln Ala Glu Ala Arg			
355	360	365	
Ser Ser Ser Trp Asn Met Val Leu Ala Arg Gly Arg Pro Thr Asp Thr			
370	375	380	
Pro Ser Tyr Phe Asn Gly Val Lys Val Gln Ile Gln Ser Leu Asn Gly			
385	390	395	400
Glu His Leu His Ile Arg Glu Phe His Arg Val Lys Val Gly Asp Ile			
405	410	415	
Ala Thr Gly Ile Ser Ser Gln Ile Pro Ala Ala Ala Phe Ser Leu Val			
420	425	430	
Thr Lys Asp Gly Gln Pro Val Arg Tyr Asp Met Glu Val Pro Asp Ser			
435	440	445	
Gly Ile Asp Leu Gln Cys Thr Leu Ala Pro Asp Gly Ser Phe Ala Trp			
450	455	460	
Ser Trp Arg Val Lys His Gly Gln Leu Glu Asn Arg Pro			
465	470	475	

<210> 4879

<211> 486

<212> PRT

<213> Homo sapiens

<400> 502

Met Gly Ser Glu Lys Asp Ser Glu Ser Pro Arg Ser Thr Ser Leu His			
1	5	10	15
Ala Ala Ala Pro Asp Pro Lys Cys Arg Ser Gly Gly Arg Arg Arg Arg			
20	25	30	
Leu Leu Ser Cys Pro His Arg Ser Cys Arg Asp Cys Leu Arg His Tyr			
35	40	45	
Leu Arg Leu Glu Ile Ser Glu Ser Arg Val Pro Ile Ser Cys Pro Glu			
50	55	60	
Cys Ser Glu Arg Leu Asn Pro His Asp Ile Arg Leu Leu Leu Ala Asp			
65	70	75	80
Pro Pro Leu Met His Lys Tyr Glu Glu Phe Met Leu Arg Arg Tyr Leu			

	85		90		95
Ala Ser Asp Pro Asp Cys Arg Trp Cys Pro Ala Pro Asp Cys Gly Tyr					
	100		105		110
Ala Val Ile Ala Tyr Gly Cys Ala Ser Cys Pro Lys Leu Thr Cys Glu					
	115		120		125
Arg Glu Gly Cys Gln Thr Glu Phe Cys Tyr His Cys Lys Gln Ile Trp					
	130		135		140
His Pro Asn Gln Thr Cys Asp Met Ala Arg Gln Gln Arg Ala Gln Thr					
145		150		155	160
Leu Arg Val Arg Thr Lys His Thr Ser Gly Leu Ser Tyr Gly Gln Glu					
	165		170		175
Ser Gly Pro Asp Asp Ile Lys Pro Cys Pro Arg Cys Ser Ala Tyr Ile					
	180		185		190
Ile Lys Met Asn Asp Gly Ser Cys Asn His Met Thr Cys Ala Val Cys					
	195		200		205
Gly Cys Glu Phe Cys Trp Leu Cys Met Lys Glu Ile Ser Asp Leu His					
	210		215		220
Tyr Leu Ser Pro Ser Gly Cys Thr Phe Trp Gly Lys Lys Pro Trp Ser					
225		230		235	240
Arg Lys Lys Lys Ile Leu Trp Gln Leu Gly Thr Leu Ile Gly Ala Pro					
	245		250		255
Val Gly Ile Ser Leu Ile Ala Gly Ile Ala Ile Pro Ala Met Val Ile					
	260		265		270
Gly Ile Pro Val Tyr Val Gly Arg Lys Ile His Ser Arg Tyr Glu Gly					
	275		280		285
Arg Lys Thr Ser Lys His Lys Arg Asn Leu Ala Ile Thr Gly Gly Val					
	290		295		300
Thr Leu Ser Val Ile Ala Ser Pro Val Ile Ala Ala Val Ser Val Gly					
305		310		315	320
Ile Gly Val Pro Ile Met Leu Ala Tyr Val Tyr Gly Val Val Pro Ile					
	325		330		335
Ser Leu Cys Arg Gly Gly Gly Cys Gly Val Ser Thr Ala Asn Gly Lys					
	340		345		350
Gly Val Lys Ile Glu Phe Asp Glu Asp Asp Gly Pro Ile Thr Val Ala					
	355		360		365
Asp Ala Trp Arg Ala Leu Lys Asn Pro Ser Ile Gly Glu Ser Ser Ile					

370 375 380
 Glu Gly Leu Thr Ser Val Leu Ser Thr Ser Gly Ser Pro Thr Asp Gly
 385 390 395 400
 Leu Ser Val Met Gln Gly Pro Tyr Ser Glu Thr Ala Ser Phe Ala Ala
 405 410 415
 Leu Ser Gly Gly Thr Leu Ser Gly Gly Ile Leu Ser Ser Gly Lys Gly
 420 425 430
 Lys Tyr Ser Arg Leu Glu Val Gln Ala Asp Val Gln Lys Glu Ile Phe
 435 440 445
 Pro Lys Asp Thr Ala Ser Leu Gly Ala Ile Ser Asp Asn Ala Ser Thr
 450 455 460
 Arg Ala Met Ala Gly Ser Ile Ile Ser Ser Tyr Asn Pro Gln Asp Arg
 465 470 475 480
 Phe Ser Met Ile His Ala
 485

<210> 4880

<211> 492

<212> PRT

<213> Homo sapiens

<400> 503

Met Ala Met Ala Leu Pro Met Pro Gly Pro Gln Glu Ala Val Val Phe
 1 5 10 15
 Glu Asp Val Ala Val Tyr Phe Thr Arg Ile Glu Trp Ser Cys Leu Ala
 20 25 30
 Pro Asp Gln Gln Ala Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Gly
 35 40 45
 Asn Leu Ala Ser Leu Gly Phe Leu Val Ala Lys Pro Ala Leu Ile Ser
 50 55 60
 Leu Leu Glu Gln Gly Glu Glu Pro Gly Ala Leu Ile Leu Gln Val Ala
 65 70 75 80
 Glu Gln Ser Val Ala Lys Ala Ser Leu Cys Thr Asp Ser Arg Met Glu
 85 90 95
 Ala Gly Ile Met Glu Ser Pro Leu Gln Arg Lys Leu Ser Arg Gln Ala

100	105	110
Gly Leu Pro Gly Thr Val Trp	Gly Cys Leu Pro Trp	Gly His Pro Val
115	120	125
Gly Gly His Pro Ala Pro Pro His	Pro His Gly Gly Pro Glu Asp Gly	
130	135	140
Ser Asp Lys Pro Thr His Pro Arg	Ala Arg Glu His Ser Ala Ser Pro	
145	150	155
Arg Val Leu Gln Glu Asp Leu Gly	Arg Pro Val Gly Ser Ser Ala Pro	
165	170	175
Arg Tyr Arg Cys Val Cys Gly Lys	Ala Phe Arg Tyr Asn Ser Leu Leu	
180	185	190
Leu Arg His Gln Ile Val His Thr	Gly Ala Lys Pro Phe Gln Cys Thr	
195	200	205
Glu Cys Gly Lys Ala Phe Lys Gln	Ser Ser Ile Leu Leu Arg His Gln	
210	215	220
Leu Ile His Thr Glu Glu Lys Pro	Phe Gln Cys Gly Glu Cys Gly Lys	
225	230	235
Ala Phe Arg Gln Ser Thr Gln Leu	Ala Ala His His Arg Val His Thr	
245	250	255
Arg Glu Arg Pro Tyr Ala Cys Gly	Glu Cys Gly Lys Ala Phe Ser Arg	
260	265	270
Ser Ser Arg Leu Leu Gln His Gln	Lys Phe His Thr Gly Glu Lys Pro	
275	280	285
Phe Ala Cys Thr Glu Cys Gly Lys	Ala Phe Cys Arg Arg Phe Thr Leu	
290	295	300
Asn Glu His Gly Arg Ile His Ser	Gly Glu Arg Pro Tyr Arg Cys Leu	
305	310	315
Arg Cys Gly Gln Arg Phe Ile Arg	Gly Ser Ser Leu Leu Lys His His	
325	330	335
Arg Leu His Ala Gln Glu Gly Ala	Gln Asp Gly Gly Ala Gly Gln Gly	
340	345	350
Ala Leu Leu Gly Ala Ala Gln Arg	Pro Gln Ala Gly Asp Pro Pro His	
355	360	365
Glu Cys Pro Val Cys Gly Arg Pro	Phe Arg His Asn Ser Leu Leu Leu	
370	375	380
Leu His Leu Arg Leu His Thr Gly	Glu Lys Pro Phe Glu Cys Ala Glu	

385 390 395 400
 Cys Gly Lys Ala Phe Gly Arg Lys Ser Asn Leu Thr Leu His Gln Lys
 405 410 415
 Ile His Thr Lys Glu Lys Pro Phe Ala Cys Thr Glu Cys Gly Lys Ala
 420 425 430
 Phe Arg Arg Ser Tyr Thr Leu Asn Glu His Tyr Arg Leu His Ser Gly
 435 440 445
 Glu Arg Pro Tyr Arg Cys Arg Ala Cys Gly Arg Ala Cys Ser Arg Leu

 450 455 460
 Ser Thr Leu Ile Gln His Gln Lys Val His Gly Arg Glu Pro Gly Glu
 465 470 475 480
 Asp Thr Glu Gly Arg Arg Ala Pro Cys Trp Ala Ser
 485 490

<210> 4881

<211> 232

<212> PRT

<213> Homo sapiens

<400> 504

Met Ile Arg Lys Val Lys Val Glu Asp Glu Asp Gln Glu Ala Glu Glu
 1 5 10 15
 Glu Val Glu Trp Pro Gln His Leu Ser Leu Leu Pro Ser Pro Phe Pro
 20 25 30
 Ala Pro Asp Leu Gly His Leu Ala Ala Ala Tyr Lys Leu Glu Pro Gly
 35 40 45
 Ala Pro Gly Ala Leu Ser Gly Leu Ala Leu Ser Gly Trp Gly Pro Met
 50 55 60
 Pro Glu Lys Pro Tyr Gly Cys Gly Glu Cys Glu Arg Arg Phe Arg Asp
 65 70 75 80
 Gln Leu Thr Leu Arg Leu His Gln Arg Leu His Arg Gly Glu Gly Pro
 85 90 95
 Cys Ala Cys Pro Ser Leu Val Arg Ser Pro Arg Gly Gly Ala Ala Pro
 100 105 110

Ala Leu Leu Leu Ser Leu Val Leu Thr Arg Thr Leu Ser Cys Pro Gln
 115 120 125
 Phe Arg Glu Ala Arg Ala Met Arg Pro Pro Gly Val Ser Lys Ala Thr
 130 135 140
 Trp Ala Ala Ala Arg Arg Phe Gly Arg Arg Gly Thr Pro Val Ser Phe
 145 150 155 160
 Pro Gln Cys Leu Arg Pro His Ser Ile Pro Ser Ser Asp Leu Leu Gly
 165 170 175
 Gln Arg Leu Ser Glu Pro Leu Leu Gly Thr Ala Glu Leu Lys Phe Leu
 180 185 190
 Glu Gly Ser His Pro Gly Ala Pro Leu Glu Ser Arg Tyr Phe Pro Asp
 195 200 205
 Pro Ala Arg Pro Gln Pro Gly Gln Glu Arg Val Val Ile Tyr Val Leu
 210 215 220
 Lys Val Ser Leu Lys Leu Lys Ser
 225 230

<210> 4882

<211> 158

<212> PRT

<213> Homo sapiens

<400> 505

Met Gly Arg Ser Pro Arg Lys Ile Asp Gln Phe Cys Asn Ser Ser Asn
 1 5 10 15
 Met Val His Gly Ser Val Thr Phe Arg Asp Val Ala Ile Asp Phe Ser
 20 25 30
 Gln Glu Glu Trp Glu Cys Leu Gln Pro Asp Gln Arg Thr Leu Tyr Arg
 35 40 45
 Asp Val Met Leu Glu Asn Tyr Ser His Leu Ile Ser Leu Gly Ser Ser
 50 55 60
 Ile Ser Lys Pro Asp Val Ile Thr Leu Leu Glu Gln Glu Lys Glu Pro
 65 70 75 80
 Trp Met Val Val Arg Lys Glu Thr Ser Arg Arg Tyr Pro Asp Leu Glu
 85 90 95

Leu Lys Tyr Gly Pro Glu Lys Val Ser Pro Glu Asn Asp Thr Ser Glu
 100 105 110
 Val Asn Leu Pro Lys Gln Ile Ser Ser Leu Ala Ser Lys Pro Ser Phe
 115 120 125
 Thr Ala Ile His Ile Gln Arg Arg Ile His Cys Arg Ile Cys Ile Ala
 130 135 140
 Phe Gly Tyr Leu Ser Leu Val Tyr Cys Ser Leu Glu Ile Leu
 145 150 155

<210> 4883

<211> 296

<212> PRT

<213> Homo sapiens

<400> 506

Met Ala Gln Arg Val Lys Phe Pro Thr Asp Thr Leu Gln Glu Leu Leu
 1 5 10 15
 Asp Val His Ala Ala Cys Glu Arg Glu Ala Ile Ala Ile Phe Met Glu
 20 25 30
 His Ser Phe Lys Asp Glu Asn Gln Glu Phe Gln Lys Lys Phe Met Glu
 35 40 45
 Thr Thr Met Asn Lys Lys Gly Asp Phe Leu Leu Gln Asn Glu Glu Ser
 50 55 60
 Ser Val Gln Tyr Cys Gln Ala Lys Leu Asn Glu Leu Ser Lys Gly Leu
 65 70 75 80
 Met Glu Ser Ile Ser Ala Gly Ser Phe Ser Val Pro Gly Gly His Lys
 85 90 95
 Leu Tyr Met Glu Thr Lys Glu Arg Ile Glu Gln Asp Tyr Trp Gln Val
 100 105 110
 Pro Arg Lys Gly Val Lys Ala Lys Glu Val Phe Gln Arg Phe Leu Glu
 115 120 125
 Ser Gln Met Val Ile Glu Glu Ser Ile Leu Gln Ser Asp Lys Ala Leu
 130 135 140
 Thr Asp Arg Glu Lys Ala Val Ala Val Asp Arg Ala Lys Lys Glu Ala
 145 150 155 160

Ala Glu Lys Glu Gln Glu Leu Leu Lys Gln Lys Leu Gln Glu Gln Gln
 165 170 175
 Gln Gln Met Glu Ala Gln Val Lys Ser Arg Lys Glu Asn Ile Ala Gln
 180 185 190
 Leu Lys Glu Lys Leu Gln Met Glu Arg Glu His Leu Leu Arg Glu Gln
 195 200 205
 Ile Met Met Leu Glu His Thr Gln Lys Val Gln Asn Asp Trp Leu His
 210 215 220
 Glu Gly Phe Lys Lys Lys Tyr Glu Glu Met Asn Ala Glu Ile Ser Gln
 225 230 235 240
 Phe Lys Arg Met Ile Asp Thr Thr Lys Asn Asp Asp Thr Pro Trp Ile
 245 250 255
 Ala Arg Thr Leu Asp Asn Leu Ala Asp Glu Leu Thr Ala Ile Leu Ser
 260 265 270
 Ala Pro Ala Lys Leu Ile Gly His Gly Val Lys Gly Val Ser Ser Leu
 275 280 285
 Phe Lys Lys His Lys Leu Pro Phe
 290 295

<210> 4884

<211> 153

<212> PRT

<213> Homo sapiens

<400> 507

Met Pro Arg Leu Pro Ala His Arg His Ile Pro Ser Phe Asn Pro Arg
 1 5 10 15
 Gly Trp Glu Pro Asn Lys Leu Trp Gln Thr Asp Val Thr His Ile Pro
 20 25 30
 Glu Phe Gly Lys Leu Arg Tyr Val His Val Ser Ile Asp Leu Ile Ser
 35 40 45
 Ala Asn Ala Leu Pro Gly Glu Ser Thr Gly Tyr Val Thr Lys His Leu
 50 55 60
 Leu Leu Thr Phe Ala Phe Met Gly Gln Pro Thr Lys Ile Lys Thr Asn
 65 70 75 80

Asn Asp Leu Ala Tyr Ala Ser Ser Gln Phe Gln Gln Phe Cys His Met
 85 90 95
 Trp Asn Ile Gln His Ser Thr Gly Ile Pro Tyr Asn Pro Gln Gly Gln
 100 105 110
 Ala Ile Val Glu Cys Ala His Ser Thr Leu Lys Asn Met Leu Lys Lys
 115 120 125
 Gln Lys Arg Gly Val Trp Val Arg Thr Leu Gln His Tyr Trp His Lys
 130 135 140
 Pro Tyr Leu Pro Leu Ile Phe Lys Ile
 145 150

<210> 4885

<211> 562

<212> PRT

<213> Homo sapiens

<400> 508

Met Leu Asp Thr Ile Ala Arg Ala Leu Gln Asp Leu Gly Arg Gln Val
 1 5 10 15
 Leu Pro Thr Leu Pro Ser Leu Ser Gln Glu Glu Val Ser Ile Ile Trp
 20 25 30
 Gly Asn Val Ser Glu Phe Val Arg Arg Gln Leu Thr Leu His Lys Gly
 35 40 45
 Val Gln Ile Pro Ala Phe Gly Thr Phe Thr Phe Ile Arg Gln Lys Leu
 50 55 60
 Glu Val Gly Asn Asn Lys Phe Ile Leu Ile Gln Arg Pro Val Phe Ile
 65 70 75 80
 Met Val Gly Lys Leu Val Gln Ile His Gly Leu Lys Gln Asn Lys Arg
 85 90 95
 Pro Gly Thr Val Asp Ser Val Leu Ser Ser Arg Glu Ala Leu Arg Lys
 100 105 110
 Trp Pro Ser Ser Val Leu Ala Phe Pro Arg Ile Glu Leu Lys Glu Met
 115 120 125
 Glu Asn Lys Leu Pro Met Glu Thr Leu Val Glu Glu Cys Gly Glu Asn

130	135	140	
Arg Glu Arg Lys Cys Lys Leu Lys Asp Gln Ser Asp Lys Glu Glu Gly			
145	150	155	160
Thr Arg Asp Ile Ser Ser Pro Lys Arg Leu Arg Asp Arg Gln Ala Leu			
	165	170	175
Phe Pro Ala Lys Val Thr Asn Val Ser Leu Leu Glu Lys Phe Glu Arg			
	180	185	190
Ser Glu Ser Gly Gly Lys Ile Met Thr Pro Glu Ser Leu Ser Tyr Pro			
	195	200	205
Ser Cys Leu Lys His Asp Ser Glu Met Lys Pro Gln Thr Ser Pro Ala			
	210	215	220
Cys Gln Asp His Asn Lys Ala Gly Gln Glu Met Cys Tyr Val Cys Leu			
225	230	235	240
Gln Arg Ala Gln Arg Asn Ser Leu Leu Tyr Tyr Ser Glu Glu Arg Arg			
	245	250	255
Arg Glu Ile Glu Asp Glu Arg Leu Ile Gln Gln Tyr Gln Met Leu Lys			
	260	265	270
Asp Gln Glu Ala Leu Phe Arg His Gln Met Lys Ser Leu Ala Thr Arg			
	275	280	285
Glu Gln Asn Gln Lys Asn Ala Ala Tyr Asn Leu Gly Val Ala Glu Ala			
	290	295	300
Ile Arg Asn His Lys Asn Glu Lys Pro Glu Phe Tyr Lys Ser Phe Leu			
305	310	315	320
Phe Asp Lys Arg Pro Leu Ser Pro Ala Leu Asn Ala Leu Lys Gln Glu			
	325	330	335
Glu Tyr Ser Arg Ser Leu Leu Lys Gln Met Asp Asn Arg Gln Glu Asn			
	340	345	350
Glu Ile Lys Gln Arg Gln Tyr Arg Glu Leu Met Asp Arg Leu Glu Gln			
	355	360	365
Val Gln Leu Thr Glu Glu Leu Ala Ala Gln Arg Ala Lys Phe Leu Lys			
	370	375	380
Asp Lys Met Glu Glu Thr Gln Cys Tyr Lys Arg Ala Leu Asp Ala Gln			
385	390	395	400
Ile Lys Asn Lys Pro Ser Arg Leu Pro Pro Phe Glu Pro Asp Ser Ser			
	405	410	415
Glu Pro Ile Phe Gly Lys Asn Glu Gly Glu Leu Met Val Glu Lys Gln			

420 425 430
 Lys Arg Glu Gln Asn Tyr Met Lys His Gln Leu Glu Ala Ala Ala Asn
 435 440 445
 His Lys Arg Lys Ala Ile Leu His Gln Leu Val Asp Gln Arg Arg Asp
 450 455 460
 Leu Gln Met Leu Gln Arg Thr Gln Arg Glu His Leu Ala Asp Arg Thr
 465 470 475 480
 Ala Glu Leu Glu Arg Val Asn Arg Val Asn Gln Cys Leu Gln Glu Asp
 485 490 495
 Trp Glu Arg Ser Ala Ala Met Lys Lys Gln Arg Asp Leu Glu Asp Lys
 500 505 510
 Ala Phe Glu Arg Ala Ser Asp Lys Leu Phe Leu Leu Asp Gln Cys Glu
 515 520 525
 Lys Tyr Arg Arg Cys Lys Gln Cys Gln Arg Arg Thr Ser Asn Val Gly
 530 535 540
 Glu Ser Asn Leu Trp Pro Leu Asn Lys Phe Leu Pro Gly Ser Arg Leu
 545 550 555 560
 Leu Val

<210> 4886

<211> 385

<212> PRT

<213> Homo sapiens

<400> 509

Met Pro Lys Lys Leu Leu Leu Pro Pro Pro Ser Ala Ser Ser Ala
 1 5 10 15
 Phe Arg Val Pro Arg Ala Arg Pro Val Pro Pro Pro Ala Met Asn Ala
 20 25 30
 Ala Arg Thr Gly Tyr Arg Val Phe Ser Ala Asn Ser Thr Ala Ala Cys
 35 40 45
 Thr Glu Leu Ala Lys Arg Ile Thr Glu Arg Leu Gly Ala Glu Leu Gly
 50 55 60
 Lys Ser Val Val Tyr Gln Glu Thr Asn Gly Glu Thr Arg Val Glu Ile

65	70	75	80
Lys Glu Ser Val Arg Gly Gln Asp Ile Phe Ile Ile Gln Thr Ile Pro			
	85	90	95
Arg Asp Val Asn Thr Ala Val Met Glu Leu Leu Ile Met Ala Tyr Ala			
	100	105	110
Leu Lys Thr Ala Cys Ala Arg Asn Ile Ile Gly Val Ile Pro Tyr Phe			
	115	120	125
Pro Tyr Ser Lys Gln Ser Lys Met Arg Lys Arg Gly Ser Ile Val Cys			
	130	135	140
Lys Leu Leu Ala Ser Met Leu Ala Lys Ala Gly Leu Thr His Ile Ile			
145	150	155	160
Thr Met Asp Leu His Gln Lys Glu Ile Gln Gly Phe Phe Ser Phe Pro			
	165	170	175
Val Asp Asn Leu Arg Ala Ser Pro Phe Leu Leu Gln Tyr Ile Gln Glu			
	180	185	190
Glu Ile Pro Asn Tyr Arg Asn Ala Val Ile Val Ala Lys Ser Pro Asp			
	195	200	205
Ala Ala Lys Arg Ala Gln Ser Tyr Ala Glu Arg Leu Arg Leu Gly Leu			
	210	215	220
Ala Val Ile His Gly Glu Ala Gln Cys Thr Glu Leu Asp Met Asp Asp			
225	230	235	240
Gly Arg His Ser Pro Pro Met Val Lys Asn Ala Thr Val His Pro Gly			
	245	250	255
Leu Glu Leu Pro Leu Met Met Ala Lys Glu Lys Pro Pro Ile Thr Val			
	260	265	270
Val Gly Asp Val Gly Gly Arg Ile Ala Ile Ile Val Asp Tyr Ile Ile			
	275	280	285
Asp Asp Val Glu Ser Phe Val Ala Ala Ala Glu Ile Leu Lys Glu Arg			
	290	295	300
Gly Ala Tyr Lys Ile Tyr Val Met Ala Thr His Gly Ile Leu Ser Ala			
305	310	315	320
Glu Ala Pro Arg Leu Ile Glu Glu Ser Ser Val Asp Glu Val Val Val			
	325	330	335
Thr Asn Thr Val Pro His Glu Val Gln Lys Leu Gln Cys Pro Lys Ile			
	340	345	350
Lys Thr Val Asp Ile Ser Leu Ile Leu Ser Glu Ala Ile Arg Arg Ile			

355 360 365
 His Asn Gly Glu Ser Met Ala Tyr Leu Phe Arg Asn Ile Thr Val Asp
 370 375 380
 Asp
 385

<210> 4887

<211> 621

<212> PRT

<213> Homo sapiens

<400> 510

Met Asp Leu Leu Thr Arg Glu Asn Val Ala Leu Lys Val Glu Ser Ala
 1 5 10 15
 Gln Gln Pro Lys Gln Val Leu Lys Met Glu Val Ala Val Leu Lys Lys
 20 25 30
 Leu Gln Gly Lys Asp His Val Cys Arg Phe Ile Gly Cys Gly Arg Asn
 35 40 45
 Glu Lys Phe Asn Tyr Val Val Met Gln Leu Gln Gly Arg Asn Leu Ala
 50 55 60
 Asp Leu Arg Arg Ser Gln Pro Arg Gly Thr Phe Thr Leu Ser Thr Thr
 65 70 75 80
 Leu Arg Leu Gly Lys Gln Ile Leu Glu Ser Ile Glu Ala Ile His Ser
 85 90 95
 Val Gly Phe Leu His Arg Asp Ile Lys Pro Ser Asn Phe Ala Met Gly
 100 105 110
 Arg Leu Pro Ser Thr Tyr Arg Lys Cys Tyr Met Leu Asp Phe Gly Leu
 115 120 125
 Ala Arg Gln Tyr Thr Asn Thr Thr Gly Asp Val Arg Pro Pro Arg Asn
 130 135 140
 Val Ala Gly Phe Arg Gly Thr Val Arg Tyr Ala Ser Val Asn Ala His
 145 150 155 160
 Lys Asn Arg Glu Met Gly Arg His Asp Asp Leu Trp Ser Leu Phe Tyr
 165 170 175
 Met Leu Val Glu Phe Ala Val Gly Gln Leu Pro Trp Arg Lys Ile Lys

180	185	190	
Asp Lys Glu Gln Val Gly Met Ile Lys Glu Lys Tyr Glu His Arg Met			
195	200	205	
Leu Leu Lys His Met Pro Ser Glu Phe His Leu Phe Leu Asp His Ile			
210	215	220	
Ala Ser Leu Asp Tyr Phe Thr Lys Pro Asp Tyr Gln Leu Ile Met Ser			
225	230	235	240
Val Phe Glu Asn Ser Met Lys Glu Arg Gly Ile Ala Glu Asn Glu Ala			
245	250	255	
Phe Asp Trp Glu Lys Ala Gly Thr Asp Ala Leu Leu Ser Thr Ser Thr			
260	265	270	
Ser Thr Pro Pro Gln Gln Asn Thr Arg Gln Thr Ala Ala Met Phe Gly			
275	280	285	
Val Val Asn Val Thr Pro Val Pro Gly Asp Leu Leu Arg Glu Asn Thr			
290	295	300	
Glu Asp Val Leu Gln Gly Glu His Leu Ser Asp Gln Glu Asn Ala Pro			
305	310	315	320
Pro Ile Leu Pro Gly Arg Pro Ser Glu Gly Leu Gly Pro Ser Pro His			
325	330	335	
Leu Val Pro His Pro Gly Gly Pro Glu Ala Glu Val Trp Glu Gly Thr			
340	345	350	
Asp Val Asn Arg Asn Lys Leu Arg Ile Asn Ile Gly Lys Ser Pro Cys			
355	360	365	
Val Glu Glu Glu Gln Ser Arg Gly Met Gly Val Pro Ser Ser Pro Val			
370	375	380	
Arg Ala Pro Pro Asp Ser Pro Thr Thr Pro Val Arg Ser Leu Arg Tyr			
385	390	395	400
Arg Arg Val Asn Ser Pro Glu Ser Glu Arg Leu Ser Thr Ala Asp Gly			
405	410	415	
Arg Val Glu Leu Pro Glu Arg Arg Ser Arg Met Asp Leu Pro Gly Ser			
420	425	430	
Pro Ser Arg Gln Ala Cys Ser Ser Gln Pro Ala Gln Met Leu Ser Val			
435	440	445	
Asp Thr Gly His Ala Asp Arg Gln Ala Ser Gly Arg Met Asp Val Ser			
450	455	460	

Ala Ser Val Glu Gln Glu Ala Leu Ser Asn Ala Phe Arg Ser Val Pro
 465 470 475 480
 Leu Ala Glu Glu Glu Asp Phe Asp Ser Lys Glu Trp Val Ile Ile Asp
 485 490 495
 Lys Glu Thr Glu Leu Lys Asp Phe Pro Pro Gly Ala Glu Pro Ser Thr
 500 505 510
 Ser Gly Thr Thr Asp Glu Glu Pro Glu Glu Leu Arg Pro Leu Pro Glu
 515 520 525
 Glu Gly Glu Glu Arg Arg Arg Leu Gly Ala Glu Pro Phe Pro Leu Thr
 530 535 540
 Pro Ala Leu Gly Thr Pro Pro Ser Thr Glu Arg Val Gly Pro His Arg
 545 550 555 560
 Pro Thr Glu Thr Val Gly Gly Gly Gln Thr Leu Gly Ala Leu Pro Pro
 565 570 575
 Ala Val Gln Pro Pro Ala Thr Thr Gly Val Leu Arg Val Leu Leu Leu
 580 585 590
 His Ala Gly Asp Gly Ala Leu Pro Ser Pro Arg Arg Arg Arg Leu Leu
 595 600 605
 Gly Leu Leu Arg Phe Pro His Ser Ala Gln Pro Leu Gly
 610 615 620

<210> 4888

<211> 267

<212> PRT

<213> Homo sapiens

<400> 511

Met Phe Arg Arg Lys Ala Glu Gly Leu Asp Leu Ala Ser Cys Val Arg
 1 5 10 15
 Ser Leu Asp Val Leu Val Leu Asp Glu Ala Asp Arg Leu Leu Asp Met
 20 25 30
 Gly Phe Glu Ala Ser Ile Asn Thr Ile Leu Glu Phe Leu Pro Lys Gln
 35 40 45
 Arg Arg Thr Gly Leu Phe Ser Ala Thr Gln Thr Gln Glu Val Glu Asn
 50 55 60

Leu Val Arg Ala Gly Leu Arg Asn Pro Val Arg Val Ser Val Lys Glu
 65 70 75 80
 Lys Gly Val Ala Ala Ser Ser Ala Gln Lys Thr Pro Ser Arg Leu Glu
 85 90 95
 Asn Tyr Tyr Met Val Cys Lys Ala Asp Glu Lys Phe Asn Gln Leu Val
 100 105 110
 His Phe Leu Arg Asn His Lys Gln Glu Lys His Leu Val Phe Phe Ser
 115 120 125
 Thr Cys Ala Cys Val Glu Tyr Tyr Gly Lys Ala Leu Glu Val Leu Val
 130 135 140
 Lys Gly Val Lys Ile Met Cys Ile His Gly Lys Met Lys Tyr Lys Arg
 145 150 155 160
 Asn Lys Ile Phe Met Glu Phe Arg Lys Leu Gln Ser Gly Ile Leu Val
 165 170 175
 Cys Thr Asp Val Met Ala Arg Gly Ile Asp Ile Pro Glu Val Asn Trp
 180 185 190
 Val Leu Gln Tyr Asp Pro Pro Ser Asn Ala Ser Ala Phe Val His Arg
 195 200 205
 Cys Gly Arg Thr Ala Arg Ile Gly His Gly Gly Ser Ala Leu Val Phe
 210 215 220
 Leu Leu Pro Met Glu Glu Ser Tyr Ile Asn Phe Leu Ala Ile Ser Gln
 225 230 235 240
 Lys Val Ser Cys Arg Pro Phe Ser Asp Arg Met Pro Ser Asp Gly Val
 245 250 255
 Ala Gly Lys Val Leu Gln His Val Val Ser Asn
 260 265

<210> 4889

<211> 700

<212> PRT

<213> Homo sapiens

<400> 512

Met Leu Ser Asp Asp His Val Asn Glu Ile Ile Ile Gln Lys Leu Ile
 1 5 10 15

Ala Ser Leu Ile Pro Met Thr Ser Arg Asp Arg Ile Lys Ala Ile Arg
 20 25 30
 Asn Gln Pro Arg Thr Met Glu Glu Lys Arg Asn Leu Ser Arg Gly Gly
 35 40 45
 Leu Thr Ile Thr Thr Glu Asp Glu Gly Arg Ala Lys Ala His Leu Thr
 50 55 60
 Trp Trp Lys Ile Val Asp Lys Glu Lys Ser Lys Gln Thr His Arg Ile
 65 70 75 80
 Leu Gln Leu Asn Cys Cys Ile Gln Cys Leu Asn Ser Ile Ser Arg Ala
 85 90 95
 Tyr Arg Arg Ser Lys Asn Ser Leu Ser Glu Ile Leu Asn Ser Ile Ser
 100 105 110
 Leu Trp Gln Lys Thr Leu Lys Ile Ile Gly Gly Lys Phe Gly Thr Ser
 115 120 125
 Val Leu Ser Tyr Phe Asn Phe Leu Arg Trp Leu Leu Lys Phe Asn Ile
 130 135 140
 Phe Ser Phe Ile Leu Asn Phe Ser Phe Ile Ile Ile Pro Gln Phe Thr
 145 150 155 160
 Val Ala Lys Lys Asn Thr Leu Gln Phe Thr Gly Leu Glu Phe Phe Thr
 165 170 175
 Gly Val Gly Tyr Phe Arg Asp Thr Val Met Tyr Tyr Gly Phe Tyr Thr
 180 185 190
 Asn Ser Thr Ile Gln His Gly Asn Ser Gly Ala Ser Tyr Asn Met Gln
 195 200 205
 Leu Ala Tyr Ile Phe Thr Ile Gly Ala Cys Leu Thr Thr Cys Phe Phe
 210 215 220
 Ser Leu Leu Phe Ser Met Ala Lys Tyr Phe Arg Asn Asn Phe Ile Asn
 225 230 235 240
 Pro His Ile Tyr Ser Gly Gly Ile Thr Lys Leu Ile Phe Cys Trp Asp
 245 250 255
 Phe Thr Val Thr His Glu Lys Ala Val Lys Leu Lys Gln Lys Asn Leu
 260 265 270
 Ser Thr Glu Ile Arg Glu Asn Leu Ser Glu Leu Arg Gln Glu Asn Ser
 275 280 285
 Lys Leu Thr Phe Asn Gln Leu Leu Thr Arg Phe Ser Ala Tyr Met Val
 290 295 300

Ala Trp Val Val Ser Thr Gly Val Ala Ile Ala Cys Cys Ala Ala Val
 305 310 315 320
 Tyr Tyr Leu Ala Glu Tyr Asn Leu Glu Phe Leu Lys Thr His Ser Asn
 325 330 335
 Pro Gly Ala Val Leu Leu Leu Pro Phe Val Val Ser Cys Ile Asn Leu
 340 345 350
 Ala Val Pro Cys Ile Tyr Ser Met Phe Arg Leu Val Glu Arg Tyr Glu
 355 360 365
 Met Pro Arg His Glu Val Tyr Val Leu Leu Ile Arg Asn Ile Phe Leu
 370 375 380
 Lys Ile Ser Ile Ile Gly Ile Leu Cys Tyr Tyr Trp Leu Asn Thr Val
 385 390 395 400
 Ala Leu Ser Gly Glu Glu Cys Trp Gly Thr Leu Ile Gly Gln Asp Ile
 405 410 415
 Tyr Arg Leu Leu Leu Met Asp Phe Val Phe Ser Leu Val Asn Ser Phe
 420 425 430
 Leu Gly Glu Phe Leu Arg Arg Ile Ile Gly Met Gln Leu Ile Thr Ser
 435 440 445
 Leu Gly Leu Gln Glu Phe Asp Ile Ala Arg Asn Val Leu Glu Leu Ile
 450 455 460
 Tyr Ala Gln Thr Leu Val Trp Ile Gly Ile Phe Phe Arg Pro Leu Leu
 465 470 475 480
 Pro Phe Ile Gln Met Ile Met Leu Phe Ile Met Phe Tyr Ser Lys Asn
 485 490 495
 Ile Ser Leu Met Met Asn Phe Gln Pro Pro Ser Lys Ala Trp Arg Ala
 500 505 510
 Ser Gln Met Met Thr Phe Phe Ile Phe Leu Leu Phe Phe Pro Ser Phe
 515 520 525
 Thr Gly Val Leu Cys Thr Leu Ala Ile Thr Ile Trp Arg Leu Lys Pro
 530 535 540
 Ser Ala Asp Cys Gly Pro Phe Arg Gly Leu Pro Leu Phe Ile His Ser
 545 550 555 560
 Ile Tyr Ser Trp Ile Asp Thr Leu Ser Thr Arg Pro Gly Tyr Leu Trp
 565 570 575
 Val Val Trp Ile Tyr Arg Asn Leu Ile Gly Ser Val His Phe Phe Phe
 580 585 590

Ile Leu Thr Leu Ile Val Leu Ile Ile Thr Tyr Leu Tyr Trp Gln Ile
 595 600 605
 Thr Glu Gly Arg Lys Ile Met Ile Arg Leu Leu His Glu Gln Ile Ile
 610 615 620
 Asn Glu Gly Lys Asp Lys Met Phe Leu Ile Glu Lys Leu Ile Lys Leu
 625 630 635 640
 Gln Asp Met Glu Lys Lys Ala Asn Pro Ser Ser Leu Val Leu Glu Arg
 645 650 655
 Arg Glu Val Glu Gln Gln Gly Phe Cys Ile Trp Gly Asn Met Met Ala
 660 665 670
 Val Leu Thr Cys Asp Leu Glu Asp Gln Phe Lys Lys Ala Ile Gln Gly
 675 680 685
 Pro Asp Asp Ser Phe Gly Asn Gln Thr Pro Ile Lys
 690 695 700

<210> 4890

<211> 174

<212> PRT

<213> Homo sapiens

<400> 513

Met Ile Ser Asn Leu Ser Trp Glu Leu Pro Gly Ser Leu Pro Leu Ile
 1 5 10 15
 Ser Val Pro Tyr Ser Met His Cys Cys Thr Leu Gly Phe Leu Ser Cys
 20 25 30
 Ser Leu Phe Leu His Met Ser Phe Glu Leu Lys Leu Leu Leu Leu
 35 40 45
 Leu Trp Leu Ala Ala Ser Cys Ser Leu Phe Leu His Ser His Ala Trp
 50 55 60
 Leu Ser Glu Cys Leu Ile Val Arg Leu Tyr Leu Gly Pro Leu Asp Ser
 65 70 75 80
 Arg Pro Gly Val Leu Lys Glu Pro Lys Leu Met Gly Ala Ile Ser Phe
 85 90 95
 Phe Ile Phe Phe Phe Thr Leu Leu Val Leu Ala Arg Gln Asn Glu Tyr
 100 105 110

Tyr Cys Arg Leu Asp Phe Leu Trp Lys Lys Lys Leu Arg Gln Glu Arg
 115 120 125
 Glu Glu Thr Glu Thr Met Glu Asn Leu Thr Arg Leu Leu Leu Glu Asn
 130 135 140
 Val Leu Pro Ala His Val Ala Pro Gln Phe Ile Gly Gln Asn Arg Arg
 145 150 155 160
 Asn Glu Ser Pro Val Pro Pro Gly Ser Leu Pro Pro Val Leu
 165 170

<210> 4891

<211> 546

<212> PRT

<213> Homo sapiens

<400> 514

Met Ile His Thr Thr Glu Lys Pro Tyr Arg Cys Asn Glu Ser Gly Lys
 1 5 10 15
 Ala Phe His Arg Gly Ser Leu Leu Thr Val His Gln Ile Val His Thr
 20 25 30
 Arg Gly Lys Pro Tyr Gln Cys Asp Val Cys Gly Arg Ile Phe Arg Gln
 35 40 45
 Asn Ser Asp Leu Val Asn His Arg Arg Ser His Thr Gly Asp Lys Pro
 50 55 60
 Tyr Ile Cys Asn Glu Cys Gly Lys Ser Phe Ser Lys Ser Ser His Leu
 65 70 75 80
 Ala Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
 85 90 95
 Arg Cys Gly Lys Cys Phe Ser Gln Ser Ser Ser Leu Ala Thr His Gln
 100 105 110
 Thr Val His Thr Gly Asp Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys
 115 120 125
 Thr Phe Lys Arg Asn Ser Ser Leu Thr Ala His His Ile Ile His Ala
 130 135 140
 Gly Lys Lys Pro Tyr Thr Cys Asp Val Cys Gly Lys Val Phe Tyr Gln
 145 150 155 160

Asn Ser Gln Leu Val Arg His Gln Ile Ile His Thr Gly Glu Thr Pro			
165	170	175	
Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Phe Gln Arg Ser Arg Leu			
180	185	190	
Ala Gly His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn			
195	200	205	
Glu Cys Gly Lys Val Phe Ser Gln His Ser His Leu Ala Val His Gln			
210	215	220	
Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys			
225	230	235	240
Ala Phe Asn Trp Gly Ser Leu Leu Thr Val His Gln Arg Ile His Thr			
245	250	255	
Gly Glu Lys Pro Tyr Lys Cys Asn Val Cys Gly Lys Val Phe Asn Tyr			
260	265	270	
Gly Gly Tyr Leu Ser Val His Met Arg Cys His Thr Gly Glu Lys Pro			
275	280	285	
Leu His Cys Asn Lys Cys Gly Met Val Phe Thr Tyr Tyr Ser Cys Leu			
290	295	300	
Ala Arg His Gln Arg Met His Thr Gly Glu Lys Pro Tyr Lys Cys Asn			
305	310	315	320
Val Cys Gly Lys Val Phe Ile Asp Ser Gly Asn Leu Ser Ile His Arg			
325	330	335	
Arg Ser His Thr Gly Glu Lys Pro Phe Gln Cys Asn Glu Cys Gly Lys			
340	345	350	
Val Phe Ser Tyr Tyr Ser Cys Leu Ala Arg His Arg Lys Ile His Thr			
355	360	365	
Gly Glu Lys Pro Tyr Lys Cys Asn Asp Cys Gly Lys Ala Tyr Thr Gln			
370	375	380	
Arg Ser Ser Leu Thr Lys His Leu Val Ile His Thr Gly Glu Asn Pro			
385	390	395	400
Tyr His Cys Asn Glu Phe Gly Glu Ala Phe Ile Gln Ser Ser Lys Leu			
405	410	415	
Ala Arg Tyr His Arg Asn Pro Thr Gly Glu Lys Pro His Lys Cys Ser			
420	425	430	
Glu Cys Gly Arg Thr Phe Ser His Lys Thr Ser Leu Val Tyr His Gln			
435	440	445	

Arg Arg His Thr Gly Glu Met Pro Tyr Lys Cys Ile Glu Cys Gly Lys
 450 455 460
 Val Phe Asn Ser Thr Thr Thr Leu Ala Arg His Arg Arg Ile His Thr
 465 470 475 480
 Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Arg Tyr
 485 490 495
 Arg Ser Gly Leu Ala Arg His Trp Ser Ile His Thr Gly Glu Lys Pro
 500 505 510
 Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Arg Val Arg Ser Ile Leu
 515 520 525
 Leu Asn His Gln Met Met His Thr Gly Glu Lys Pro Tyr Lys Cys Asn
 530 535 540
 Glu Cys
 545

<210> 4892

<211> 113

<212> PRT

<213> Homo sapiens

<400> 515

Met Met His Leu Gln Pro Ala Trp Ser Ser Phe Gly Gln Ser Gly Pro
 1 5 10 15
 Ile Leu Met Arg Ser Gly Gly Met Gln Leu Leu Leu Leu Pro His Gly
 20 25 30
 Ser Val Arg Pro Asn Gln Pro Ala Leu Ser Pro Leu Pro Ala Val Tyr
 35 40 45
 Gln Val Ala Leu Glu Arg Gly His Pro Glu Gly Thr Thr Cys Ala Ala
 50 55 60
 Val Gly Gly Gly Lys Ile Asn Arg Pro Arg Thr Pro Gly Gln Ala Gly
 65 70 75 80
 Ala Thr Glu Glu Val Ser Ser Lys Gly Gly Lys Leu Ser Gly Leu Phe
 85 90 95
 Leu Thr Ile Leu Pro Val Pro Arg Pro Trp Thr Ala Gly Gln Pro Gln
 100 105 110

Ser

<210> 4893

<211> 129

<212> PRT

<213> Homo sapiens

<400> 516

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Met Met Thr Asp Leu Lys Gln Ser His Ser Val Arg Leu Asn Asp Gly
  1             5             10             15
Pro Phe Met Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Asp His Thr
      20             25             30
Pro Lys Ser Gln Ala Ala Glu Ala Thr Lys Val Ala Ile Asp Val Gly
      35             40             45
Phe Arg His Ile Asp Ser Ala Tyr Leu Tyr Gln Asn Glu Glu Glu Val
      50             55             60
Gly Gln Ala Ile Trp Glu Lys Ile Ala Asp Gly Thr Val Lys Arg Glu
      65             70             75             80
Glu Ile Phe Tyr Thr Ile Lys Leu Trp Ala Thr Phe Phe Arg Ala Glu
      85             90             95
Leu Val His Pro Ala Leu Glu Arg Ser Leu Lys Lys Leu Gly Pro Asp
      100            105            110
Tyr Val Asp Leu Phe Ile Ile His Val Pro Phe Ala Met Lys Gly Ser
      115            120            125
Ser

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<210> 4894

<211> 105

<212> PRT

<213> Homo sapiens

<400> 517

Met Cys Pro Val Cys Gly Arg Ala Leu Ser Ser Pro Gly Ser Leu Gly
 1 5 10 15
 Arg His Leu Leu Ile His Ser Glu Asp Gln Arg Ser Asn Cys Ala Val
 20 25 30
 Cys Gly Ala Arg Phe Thr Ser His Ala Thr Phe Asn Arg Ser Ala Gly
 35 40 45
 His Leu Ser Leu Leu Cys Trp Glu Gln Ile Thr Gly Cys Glu Phe Cys
 50 55 60
 Phe Leu Lys Ser Lys Arg Arg Leu Glu Ile Gly Asn Ala Lys Ala Ala
 65 70 75 80
 Asp Ala Cys Ser Leu Glu Val Gln Val Arg Arg Leu Gly Asn Met Pro
 85 90 95
 Ile Pro Ser His Ser Pro Lys Gly Lys
 100 105

<210> 4895

<211> 646

<212> PRT

<213> Homo sapiens

<400> 518

Met Phe Leu Ser Ile Ser Thr Arg Leu Pro Ser Gln Tyr Ile Tyr Gly
 1 5 10 15
 Phe Gly Glu Thr Glu His Thr Thr Phe Arg Arg Asn Met Asn Trp Asn
 20 25 30
 Thr Trp Gly Met Phe Ala His Asp Glu Pro Pro Ala Tyr Lys Lys Asn
 35 40 45
 Ser Tyr Gly Val His Pro Tyr Tyr Met Ala Leu Glu Glu Asp Gly Ser
 50 55 60
 Ala His Gly Val Leu Leu Leu Asn Ser Asn Ala Met Asp Val Thr Leu
 65 70 75 80
 Gln Pro Thr Pro Ala Leu Thr Tyr Arg Thr Thr Gly Gly Ile Leu Asp
 85 90 95
 Phe Tyr Ile Val Leu Gly Pro Thr Pro Glu Leu Val Thr Gln Gln Tyr
 100 105 110

Thr Glu Leu Ile Gly Arg Pro Ala Met Ile Pro Tyr Trp Ala Leu Gly
 115 120 125
 Phe His Leu Ser Arg Tyr Gly Tyr Gln Asn Asp Ala Glu Ile Ser Ser
 130 135 140
 Leu Tyr Asp Ala Met Val Ala Ala Gln Ile Pro Tyr Asp Val Gln His
 145 150 155 160
 Val Asp Ile Asp Tyr Met Asn Arg Lys Leu Asp Phe Thr Leu Ser Ala
 165 170 175
 Asn Phe Gln Asn Leu Ser Leu Leu Ile Glu Gln Met Lys Lys Asn Gly
 180 185 190
 Met Arg Phe Ile Leu Ile Leu Asp Pro Ala Ile Ser Gly Asn Glu Thr
 195 200 205
 Gln Tyr Leu Pro Phe Ile Arg Gly Gln Glu Asn Asn Val Phe Ile Lys
 210 215 220
 Trp Pro Asp Thr Asn Asp Ile Val Trp Gly Lys Val Trp Pro Asp Leu
 225 230 235 240
 Pro Asn Val Ile Val Asp Gly Ser Leu Asp His Glu Thr Gln Val Lys
 245 250 255
 Leu Tyr Arg Ala Tyr Val Ala Phe Pro Asp Phe Phe Arg Asn Ser Thr
 260 265 270
 Ala Ala Trp Trp Lys Lys Glu Ile Glu Glu Leu Tyr Ala Asn Pro Arg
 275 280 285
 Glu Pro Glu Lys Ser Leu Lys Phe Asp Gly Leu Trp Ile Asp Met Asn
 290 295 300
 Glu Pro Ser Asn Phe Val Asp Gly Ser Val Arg Gly Cys Ser Asn Glu
 305 310 315 320
 Met Leu Asn Asn Pro Pro Tyr Met Pro Tyr Leu Glu Ser Arg Asp Lys
 325 330 335
 Gly Leu Ser Ser Lys Thr Leu Cys Met Glu Ser Gln Gln Ile Leu Pro
 340 345 350
 Asp Ser Ser Pro Val Glu His Tyr Asn Val His Asn Leu Tyr Gly Trp
 355 360 365
 Ser Gln Thr Arg Pro Thr Tyr Glu Ala Val Gln Glu Val Thr Gly Gln
 370 375 380
 Arg Gly Val Ile Ile Thr Arg Ser Thr Phe Pro Ser Ser Gly Arg Trp
 385 390 395 400

Gly Gly His Arg Leu Gly Asn Asn Thr Ala Ala Trp Asp Gln Leu Gly
 405 410 415
 Lys Ser Ile Ile Gly Met Met Glu Phe Ser Leu Phe Gly Ile Pro Tyr
 420 425 430
 Thr Gly Ala Asp Ile Cys Gly Phe Phe Gly Asp Ala Glu Tyr Glu Met
 435 440 445
 Cys Val Arg Trp Met Gln Leu Gly Ala Phe Tyr Pro Phe Ser Arg Asn
 450 455 460
 His Asn Asn Ile Gly Thr Arg Arg Gln Asp Pro Val Ala Trp Asn Ser
 465 470 475 480
 Thr Phe Glu Met Leu Ser Arg Lys Val Leu Glu Thr Arg Tyr Thr Leu
 485 490 495
 Leu Pro Tyr Leu Tyr Thr Leu Met His Lys Ala His Val Glu Gly Ser
 500 505 510
 Thr Val Val Arg Pro Leu Leu His Glu Phe Thr Asp Asp Arg Thr Thr
 515 520 525
 Trp Asp Ile Asp Arg Gln Phe Met Leu Gly Pro Ala Ile Leu Ile Ser
 530 535 540
 Pro Val Leu Glu Thr Ser Thr Phe Glu Ile Ser Ala Tyr Phe Pro Arg
 545 550 555 560
 Ala Arg Trp Tyr Asp Tyr Ser Thr Gly Thr Ser Ser Thr Ser Thr Gly
 565 570 575
 Gln Arg Lys Ile Leu Lys Ala Pro Leu Asp His Ile Asn Leu His Val
 580 585 590
 Arg Gly Gly Tyr Ile Leu Pro Trp Gln Glu Pro Ala Met Asn Thr His
 595 600 605
 Ser Ser Arg Gln Asn Phe Met Gly Leu Ile Val Ala Leu Asp Asp Asn
 610 615 620
 Gly Thr Ala Glu Gly Gln Val Phe Trp Asp Asp Gly Gln Ser Ile Val
 625 630 635 640
 Phe Asn Thr Thr Ala Met
 645

<210> 4896

<211> 472

<212> PRT

<213> Homo sapiens

<400> 519

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Met Ala Ser Pro Pro Arg Cys Ser Pro Thr Ala His Asp Arg Glu Cys
  1             5             10            15
Lys Leu Pro Pro Pro Ser Ala Pro Ala Ser Glu Tyr Cys Pro Gly Lys
      20             25            30
Leu Ser Trp Gly Thr Met Ala Arg Ala Leu Gly Arg Phe Lys Leu Ser
      35             40            45
Ile Pro His Thr His Leu Leu Ala Thr Leu Asp Pro Leu Ala Leu Asp
      50             55            60
Arg Glu Pro Pro Pro His Leu Leu Pro Glu Lys His Gln Val Pro Glu
      65             70            75            80
Lys Leu Ile Trp Gly Asp Gln Asp Pro Leu Ser Lys Ile Pro Phe Lys
      85             90            95
Ile Leu Ser Gly His Glu His Ala Val Ser Thr Cys His Phe Cys Val
      100            105            110
Asp Asp Thr Lys Leu Leu Ser Gly Ser Tyr Asp Cys Thr Val Lys Leu
      115            120            125
Trp Asp Pro Val Asp Gly Ser Val Val Arg Asp Phe Glu His Arg Pro
      130            135            140
Lys Ala Pro Val Val Glu Cys Ser Ile Thr Gly Asp Ser Ser Arg Val
      145            150            155            160
Ile Ala Ala Ser Tyr Asp Lys Thr Val Arg Ala Trp Asp Leu Glu Thr
      165            170            175
Gly Lys Leu Leu Trp Lys Val Arg Tyr Asp Thr Phe Ile Val Ser Cys
      180            185            190
Lys Phe Ser Pro Asp Gly Lys Tyr Val Val Ser Gly Phe Asp Val Asp
      195            200            205
His Gly Ile Cys Ile Met Asp Ala Glu Asn Ile Thr Thr Val Ser Val
      210            215            220
Ile Lys Asp His His Thr Arg Ser Ile Thr Ser Cys Cys Phe Asp Pro
      225            230            235            240
Asp Ser Gln Arg Val Ala Ser Val Ser Leu Asp Arg Cys Ile Lys Ile
      245            250            255

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Trp Asp Val Thr Ser Gln Ala Thr Leu Leu Thr Ile Thr Lys Ala His
 260 265 270
 Ser Asn Ala Ile Ser Asn Cys Cys Phe Thr Phe Ser Gly His Phe Leu
 275 280 285
 Cys Thr Ser Ser Trp Asp Lys Asn Leu Lys Ile Trp Asn Val His Thr
 290 295 300
 Gly Glu Phe Arg Asn Arg Gly Ala Cys Val Thr Leu Met Gln Gly His

 305 310 315 320
 Glu Gly Ser Val Ser Ser Cys His Phe Ala Arg Asp Ser Ser Phe Leu
 325 330 335
 Ile Ser Gly Gly Phe Asp Arg Thr Val Ala Ile Trp Asp Val Ala Glu
 340 345 350
 Gly Tyr Arg Lys Leu Ser Leu Lys Gly His Asn Asp Trp Val Met Asp
 355 360 365
 Val Ala Ile Ser Asn Asn Lys Lys Trp Ile Leu Ser Ala Ser Lys Asp
 370 375 380
 Arg Thr Met Arg Leu Trp Asn Ile Glu Glu Ile Asp Glu Ile Pro Leu
 385 390 395 400
 Val Ile Lys Tyr Lys Lys Ala Val Gly Leu Lys Leu Lys Gln Cys Glu
 405 410 415
 Arg Cys Asp Arg Pro Phe Ser Ile Phe Lys Ser Asp Thr Ser Ser Glu
 420 425 430
 Met Phe Thr Gln Cys Val Phe Cys Arg Ile Asp Thr Arg Gly Leu Pro
 435 440 445
 Ala Asp Thr Ser Ser Ser Ser Ser Ser Ser Glu Arg Glu Asn Ser Pro
 450 455 460
 Pro Pro Arg Gly Ser Lys Asp Asp
 465 470

<210> 4897

<211> 466

<212> PRT

<213> Homo sapiens

<400> 520

Met Phe Val Gly Val Ala Arg His Ser Gly Ser Gln Asp Glu Val Ser
 1 5 10 15
 Arg Gly Val Glu Pro Leu Asp Ala Ala Arg Ala Gln Pro Ala Lys Asp
 20 25 30
 Arg Arg Ala Lys Gly Thr Pro Lys Ser Ser Lys Pro Gly Lys Lys His
 35 40 45
 Arg Tyr Leu Arg Leu Leu Pro Glu Ala Leu Ile Arg Phe Gly Gly Phe
 50 55 60
 Arg Lys Arg Lys Lys Ala Lys Ser Ser Val Ser Lys Lys Pro Gly Glu
 65 70 75 80
 Val Asp Asp Ser Leu Glu Gln Pro Cys Gly Leu Gly Cys Leu Val Ser
 85 90 95
 Thr Cys Cys Glu Cys Cys Asn Asn Ile Arg Cys Phe Met Ile Phe Tyr
 100 105 110
 Cys Ile Leu Leu Ile Cys Gln Gly Val Val Phe Gly Leu Ile Asp Val
 115 120 125
 Ser Ile Gly Asp Phe Gln Lys Glu Tyr Gln Leu Lys Thr Ile Glu Lys
 130 135 140
 Leu Ala Leu Glu Lys Ser Tyr Asp Ile Ser Ser Gly Leu Val Ala Ile
 145 150 155 160
 Phe Ile Ala Phe Tyr Gly Asp Arg Lys Lys Val Ile Trp Phe Val Ala
 165 170 175
 Ser Ser Phe Leu Ile Gly Leu Gly Ser Leu Leu Cys Ala Phe Pro Ser
 180 185 190
 Ile Asn Glu Glu Asn Lys Gln Ser Lys Val Gly Ile Glu Gly Ile Ala
 195 200 205
 Glu Cys Thr Ser Met Ile Gly Tyr Ala Leu Gly Tyr Val Leu Gly Ala
 210 215 220
 Pro Leu Val Lys Val Pro Glu Asn Thr Thr Ser Ala Thr Lys Thr Gly
 225 230 235 240
 Lys Leu Gly Asn Leu Thr Ala Pro Cys Asn Glu Lys Cys Arg Cys Ser
 245 250 255
 Ser Ser Ile Tyr Ser Ser Ile Cys Gly Arg Asp Asp Ile Glu Tyr Phe
 260 265 270
 Ser Pro Cys Phe Ala Gly Cys Thr Tyr Ser Lys Ala Gln Asn Gln Lys

275 280 285
 Lys Met Tyr Tyr Asn Cys Ser Cys Ile Lys Glu Gly Leu Ile Thr Ala
 290 295 300
 Asp Ala Glu Gly Asp Phe Ile Asp Ala Arg Pro Gly Lys Cys Asp Ala
 305 310 315 320
 Lys Cys Tyr Lys Leu Pro Leu Phe Ile Ala Phe Ile Phe Ser Thr Leu
 325 330 335
 Ile Phe Ser Gly Phe Ser Gly Val Pro Ile Val Leu Ala Met Thr Arg
 340 345 350
 Val Val Pro Asp Lys Leu Arg Ser Leu Ala Leu Gly Val Ser Tyr Val
 355 360 365
 Ile Leu Arg Ile Phe Gly Thr Ile Pro Gly Pro Ser Ile Phe Lys Met
 370 375 380
 Ser Gly Glu Thr Ser Cys Ile Leu Arg Asp Val Asn Lys Cys Gly His
 385 390 395 400
 Arg Gly Arg Cys Trp Ile Tyr Asn Lys Thr Lys Met Ala Phe Leu Leu
 405 410 415
 Val Gly Ile Cys Phe Leu Cys Lys Leu Cys Thr Ile Ile Phe Thr Thr
 420 425 430
 Ile Ala Phe Phe Ile Tyr Lys Arg Arg Leu Asn Glu Asn Thr Asp Phe
 435 440 445
 Pro Asp Val Thr Val Lys Asn Pro Lys Val Lys Lys Lys Glu Glu Thr
 450 455 460
 Asp Leu
 465

<210> 4898

<211> 679

<212> PRT

<213> Homo sapiens

<400> 521

Met Met His Tyr Leu Lys Asn Ile Met Ile Ala Val Val Glu Ser Met
 1 5 10 15
 Ile Asn Lys Phe Glu Glu Asp Glu Thr Arg Asn Gln Glu Arg Gln Lys

	20		25		30
Lys	Ile	Gln	Lys	Glu	Lys
			Ser	His	Ser
			Ser	Tyr	Arg
			Thr	Asp	Asn
			Cys	Ser	
	35		40		45
Asp	Ser	Asp	Ser	Ser	Leu
			Asn	Gln	Ser
			Tyr	Lys	Phe
			Cys	Gln	Gly
			Lys		
	50		55		60
Leu	Gln	Leu	Ile	Leu	Asp
			Gln	Leu	Asp
			Pro	Gly	Gln
			Pro	Lys	Glu
			Val		
	65		70		75
			80		
Arg	Tyr	Glu	Ala	Leu	Gln
			Thr	Leu	Cys
			Ser	Ala	Pro
			Pro	Ser	Asp
			Val		
		85		90	
				95	
Leu	Asn	Cys	Glu	Asn	Trp
			Thr	Thr	Leu
			Cys	Glu	Lys
			Leu	Thr	Val
			Ser		
	100		105		110
Leu	Ser	Asp	Pro	Asp	Pro
			Val	Phe	Ser
			Asp	Arg	Ile
			Leu	Lys	Phe
			Cys		
	115		120		125
Ala	Gln	Thr	Phe	Leu	Leu
			Ser	Pro	Leu
			His	Met	Thr
			Lys	Glu	Ile
			Tyr		
	130		135		140
Thr	Ser	Leu	Ala	Lys	Tyr
			Leu	Glu	Ser
			Tyr	Phe	Leu
			Ser	Arg	Glu
			Asn		
	145		150		155
			160		
His	Ile	Pro	Thr	Leu	Ser
			Ala	Gly	Val
			Asp	Ile	Thr
			Asn	Pro	Asn
			Met		
		165		170	
				175	
Thr	Arg	Leu	Leu	Lys	Lys
			Val	Arg	Leu
			Leu	Asn	Glu
			Tyr	Gln	Lys
			Glu		
	180		185		190
Ala	Pro	Ser	Phe	Trp	Ile
			Arg	His	Pro
			Glu	Lys	Tyr
			Met	Glu	Glu
			Ile		
	195		200		205
Val	Glu	Ser	Thr	Leu	Ser
			Leu	Leu	Thr
			Val	Lys	His
			Asn	Gln	Ser
			His		
	210		215		220
Val	Val	Ser	Gln	Lys	Ile
			Leu	Asp	Pro
			Ile	Tyr	Phe
			Phe	Ala	Leu
			Val		
	225		230		235
			240		
Asp	Thr	Lys	Ala	Val	Trp
			Phe	Lys	Lys
			Trp	Met	His
			Ala	His	Tyr
			Ser		
		245		250	
				255	
Arg	Thr	Thr	Val	Leu	Arg
			Leu	Leu	Glu
			Lys	Lys	Tyr
			Lys	Ser	Leu
			Val		
	260		265		270
Thr	Thr	Ala	Ile	Gln	Gln
			Cys	Val	Gln
			Tyr	Phe	Glu
			Met	Cys	Lys
			Thr		
	275		280		285
Arg	Lys	Ala	Asp	Glu	Thr
			Leu	Gly	His
			Ser	Lys	His
			Cys	Arg	Asn
			Lys		
	290		295		300
Gln	Lys	Thr	Phe	Tyr	Tyr
			Leu	Gly	Gln
			Glu	Leu	Gln
			Tyr	Ile	Tyr
			Phe		

305 310 315 320
 Ile His Ser Leu Cys Leu Leu Gly Arg Leu Leu Ile Tyr Lys Gln Gly
 325 330 335
 Arg Lys Leu Phe Pro Ile Lys Leu Lys Asn Lys Lys Gly Leu Val Ser
 340 345 350
 Leu Ile Asp Leu Leu Val Leu Phe Thr Gln Leu Ile Tyr Tyr Ser Pro
 355 360 365
 Ser Cys Pro Lys Met Thr Ser Ala Ala His Ser Glu Asn Tyr Ser Pro
 370 375 380
 Ala Ser Met Val Thr Glu Val Leu Trp Ile Leu Ser Asp Gln Lys Glu
 385 390 395 400
 Cys Ala Val Glu Cys Leu Tyr Asn Asn Ile Val Ile Glu Thr Leu Leu
 405 410 415
 Gln Pro Ile His Asn Leu Met Lys Gly Asn Glu Ala Ser Pro Asn Cys
 420 425 430
 Ser Glu Thr Ala Leu Ile His Ile Ala Gly Ile Leu Ala Arg Ile Ala
 435 440 445
 Ser Val Glu Glu Gly Leu Ile Leu Leu Leu Tyr Gly Ala Asn Met Asn
 450 455 460
 Ser Ser Glu Glu Ser Pro Thr Gly Ala His Ile Ile Ala Gln Phe Ser
 465 470 475 480
 Lys Lys Leu Leu Asp Glu Asp Ile Ser Ile Phe Ser Gly Ser Glu Met
 485 490 495
 Leu Pro Val Val Lys Gly Ala Phe Ile Ser Val Cys Arg His Ile Tyr
 500 505 510
 Ser Thr Cys Glu Gly Leu Gln Val Leu Ile Thr Tyr Asn Leu His Glu
 515 520 525
 Ser Ile Ala Lys Ala Trp Lys Lys Thr Ser Leu Leu Ser Glu Arg Ile
 530 535 540
 Pro Thr Pro Val Glu Gly Ser Asp Ser Val Ser Ser Val Ser Gln Glu
 545 550 555 560
 Ser Gln Asn Ile Met Ala Trp Glu Asp Asn Leu Leu Asp Asp Leu Leu
 565 570 575
 His Phe Ala Ala Thr Pro Lys Gly Leu Leu Leu Leu Gln Arg Thr Gly
 580 585 590
 Ala Ile Asn Glu Cys Val Thr Phe Ile Phe Asn Arg Tyr Ala Lys Lys

595 600 605
 Leu Gln Val Ser Arg His Lys Lys Phe Gly Tyr Gly Val Leu Val Thr
 610 615 620
 Arg Val Ala Ser Thr Ala Ala Gly Gly Ile Ala Leu Lys Lys Ser Gly
 625 630 635 640
 Phe Ile Asn Glu Leu Ile Thr Glu Leu Trp Ser Asn Leu Glu Tyr Gly

645 650 655
 Arg Asp Asp Val Arg Val Thr His Pro Arg Thr Thr Pro Val Asp Pro
 660 665 670
 Ile Asp Arg Ser Cys Gln Lys
 675

<210> 4899

<211> 1148

<212> PRT

<213> Homo sapiens

<400> 522

Met Val Leu Asn Leu Tyr Gln Leu Asn Gln Leu Asp Cys Pro Gly Gly
 1 5 10 15
 Arg Leu Ile Gly Gly Trp Glu Asp Asn Pro Phe Lys Gly Asp Leu Lys
 20 25 30
 Ile Val Leu Arg Gly Asn His Thr Thr Gln Asp Trp Ala Leu Pro Glu
 35 40 45
 Gly Pro Asn Gln Gly Ala Lys Val Leu Gly Val Phe Gly Glu Leu Asp
 50 55 60
 Leu His Gly Ile Pro His Ser Ile Tyr Lys Thr Lys Leu Ser Glu Thr
 65 70 75 80
 Ala Phe Ala Gly Ser Lys Val Leu Ser Leu Met Asp Ala Val Asp Trp
 85 90 95
 Gln Glu Gly Glu Glu Ile Val Ile Thr Thr Thr Ser Tyr Asp Phe His
 100 105 110
 Gln Thr Glu Thr Arg Ser Ile Val Lys Ile Leu His Asp His Lys Ile
 115 120 125

Leu Ile Leu Asn Asp Ser Leu Ser Tyr Thr His Phe Ala Glu Lys Tyr
 130 135 140
 His Val Pro Gly Thr Gly Glu Ser Tyr Thr Leu Ala Ala Asp Val Gly
 145 150 155 160
 Ile Leu Ser Arg Asn Ile Lys Ile Val Gly Glu Asp Tyr Pro Gly Trp
 165 170 175
 Ser Glu Asp Ser Phe Gly Ala Arg Val Leu Val Gly Ser Phe Thr Glu
 180 185 190
 Asn Met Met Thr Phe Lys Gly Asn Ala Arg Ile Ser Asn Val Glu Phe
 195 200 205
 Tyr His Ser Gly Gln Glu Gly Phe Arg Asp Ser Thr Asp Pro Arg Tyr
 210 215 220
 Ala Val Thr Phe Leu Asn Leu Gly Gln Ile Gln Glu His Gly Ser Ser
 225 230 235 240
 Tyr Ile Arg Gly Cys Ala Phe His His Gly Phe Ser Pro Ala Ile Gly
 245 250 255
 Val Phe Gly Thr Asp Gly Leu Asp Ile Asp Asp Asn Ile Ile His Phe
 260 265 270
 Thr Val Gly Glu Gly Ile Arg Ile Trp Gly Asn Ala Asn Arg Val Arg
 275 280 285
 Gly Asn Leu Ile Ala Leu Ser Val Trp Pro Gly Thr Tyr Gln Asn Arg
 290 295 300
 Lys Asp Leu Ser Ser Thr Leu Trp His Ala Ala Ile Glu Ile Asn Arg
 305 310 315 320
 Gly Thr Asn Thr Val Leu Gln Asn Asn Val Val Ala Gly Phe Gly Arg
 325 330 335
 Ala Gly Tyr Arg Ile Asp Gly Glu Pro Cys Pro Gly Gln Phe Asn Pro
 340 345 350
 Val Glu Lys Trp Phe Asp Asn Glu Ala His Gly Gly Leu Tyr Gly Ile
 355 360 365
 Tyr Met Asn Gln Asp Gly Leu Pro Gly Cys Ser Leu Ile Gln Gly Phe
 370 375 380
 Thr Ile Trp Thr Cys Trp Asp Tyr Gly Ile Tyr Phe Gln Thr Thr Glu
 385 390 395 400
 Ser Val His Ile Tyr Asn Val Thr Leu Val Asp Asn Gly Met Ala Ile
 405 410 415

Phe Pro Met Ile Tyr Met Pro Ala Ala Ile Ser His Lys Ile Ser Ser
 420 425 430
 Lys Asn Val Gln Ile Lys Ser Ser Leu Ile Val Gly Ser Ser Pro Gly
 435 440 445
 Phe Asn Cys Ser Asp Val Leu Thr Asn Asp Asp Pro Asn Ile Glu Leu
 450 455 460
 Thr Ala Ala His Arg Ser Pro Arg Ser Pro Ser Gly Gly Arg Ser Gly
 465 470 475 480
 Ile Arg Trp Pro Thr Phe Ala Ser Ala His Asn Met Ala Pro Arg Lys
 485 490 495
 Pro His Ala Gly Ile Met Ser Tyr Asn Ala Ile Ser Gly Leu Leu Asp
 500 505 510
 Ile Ser Gly Ser Thr Phe Val Gly Phe Lys Asn Val Cys Ser Gly Glu
 515 520 525
 Thr Asn Val Ile Phe Ile Thr Asn Pro Leu Asn Glu Asp Leu Gln His
 530 535 540
 Pro Ile His Val Lys Asn Ile Lys Leu Val Asp Thr Thr Glu Gln Ser
 545 550 555 560
 Lys Ile Phe Ile His Arg Pro Asp Ile Ser Lys Val Asn Pro Ser Asp
 565 570 575
 Cys Val Asp Met Val Cys Asp Ala Lys Arg Lys Ser Phe Leu Arg Asp
 580 585 590
 Ile Asp Gly Ser Phe Leu Gly Asn Ala Gly Ser Val Ile Pro Gln Ala
 595 600 605
 Glu Tyr Glu Trp Asp Gly Asn Ser Gln Val Gly Ile Gly Asp Tyr Arg
 610 615 620
 Ile Pro Lys Ala Met Leu Thr Phe Leu Asn Gly Ser Arg Ile Pro Val
 625 630 635 640
 Thr Glu Lys Ala Pro His Lys Gly Ile Ile Arg Asp Ser Thr Cys Lys
 645 650 655
 Tyr Leu Pro Glu Trp Gln Ser Tyr Gln Cys Phe Gly Met Glu Tyr Ala
 660 665 670
 Met Met Val Ile Glu Ser Leu Asp Pro Asp Thr Glu Thr Arg Arg Leu
 675 680 685
 Ser Pro Val Ala Ile Met Gly Asn Gly Tyr Val Asp Leu Ile Asn Gly
 690 695 700

Pro Gln Asp His Gly Trp Cys Ala Gly Tyr Thr Cys Gln Arg Arg Leu
 705 710 715 720
 Ser Leu Phe His Ser Ile Val Ala Leu Asn Lys Ser Tyr Glu Val Tyr
 725 730 735
 Phe Thr Gly Thr Ser Pro Gln Asn Leu Arg Leu Met Leu Leu Asn Val
 740 745 750
 Asp His Asn Lys Ala Val Leu Val Gly Ile Phe Phe Ser Thr Leu Gln
 755 760 765
 Arg Leu Asp Val Tyr Val Asn Asn Leu Leu Val Cys Pro Lys Thr Thr
 770 775 780
 Ile Trp Asn Ala Gln Gln Lys His Cys Glu Leu Asn Asn His Leu Tyr
 785 790 795 800
 Lys Asp Gln Phe Leu Pro Asn Leu Asp Ser Thr Val Leu Gly Glu Asn
 805 810 815
 Tyr Phe Asp Gly Thr Tyr Gln Met Leu Tyr Leu Leu Val Lys Gly Thr
 820 825 830
 Ile Pro Val Glu Ile His Thr Ala Thr Val Ile Phe Val Ser Phe Gln
 835 840 845
 Leu Ser Val Ala Thr Glu Asp Asp Phe Tyr Thr Ser His Asn Leu Val
 850 855 860
 Lys Asn Leu Ala Leu Phe Leu Lys Ile Pro Ser Asp Lys Ile Arg Ile
 865 870 875 880
 Ser Lys Ile Arg Gly Lys Ser Leu Arg Arg Lys Arg Ser Met Gly Phe
 885 890 895
 Ile Ile Glu Ile Glu Ile Gly Asp Pro Pro Ile Gln Phe Ile Ser Asn
 900 905 910
 Gly Thr Thr Gly Gln Met Gln Leu Ser Glu Leu Gln Glu Ile Ala Gly
 915 920 925
 Ser Leu Gly Gln Ala Val Ile Leu Gly Asn Ile Ser Ser Ile Leu Gly
 930 935 940
 Phe Asn Ile Ser Ser Met Ser Ile Thr Asn Pro Leu Pro Ser Pro Ser
 945 950 955 960
 Asp Ser Gly Trp Ile Lys Val Thr Ala Gln Pro Val Glu Arg Ser Ala
 965 970 975
 Phe Pro Val His His Val Ala Phe Val Ser Ser Leu Leu Val Ile Thr
 980 985 990

Gln Pro Val Ala Ala Gln Pro Gly Gln Pro Phe Pro Gln Gln Pro Ser
 995 1000 1005
 Val Lys Ala Thr Asp Ser Asp Gly Asn Cys Val Ser Val Gly Ile Thr
 1010 1015 1020
 Ala Leu Thr Leu Arg Ala Ile Leu Lys Asp Ser Asn Asn Asn Gln Val
 1025 1030 1035 1040
 Asn Gly Leu Ser Gly Asn Thr Thr Ile Pro Phe Ser Ser Cys Trp Ala
 1045 1050 1055
 Asn Tyr Thr Asp Leu Thr Pro Leu Arg Thr Gly Lys Asn Tyr Lys Ile
 1060 1065 1070
 Glu Phe Ile Leu Asp Asn Val Val Gly Val Glu Ser Arg Thr Phe Ser
 1075 1080 1085
 Leu Leu Ala Glu Ser Val Ser Ser Ser Gly Ser Ser Ser Ser Ser Asn
 1090 1095 1100
 Ser Lys Ala Ser Thr Val Gly Thr Tyr Ala Gln Ile Met Thr Val Val
 1105 1110 1115 1120
 Ile Ser Cys Leu Val Gly Arg Met Trp Leu Leu Glu Ile Phe Met Ala
 1125 1130 1135
 Ala Val Ser Thr Leu Asn Ile Thr Leu Arg Ser Tyr
 1140 1145

<210> 4900

<211> 300

<212> PRT

<213> Homo sapiens

<400> 523

Met His Ser Leu Lys Lys Val Thr Phe Glu Asp Val Ala Ile Asp Phe
 1 5 10 15
 Thr Gln Glu Glu Trp Ala Met Met Asp Thr Ser Lys Arg Lys Leu Tyr
 20 25 30
 Arg Asp Val Met Leu Glu Asn Ile Ser His Leu Val Ser Leu Gly Tyr
 35 40 45
 Gln Ile Ser Lys Ser Tyr Ile Ile Leu Gln Leu Glu Gln Gly Lys Glu

50	55	60
Leu Trp Arg Glu Gly Arg Glu Phe Leu Gln Asp Gln Asn Pro Asp Arg		
65	70	75
Glu Ser Ala Leu Lys Lys Lys His Met Ile Ser Met His Pro Ile Thr		
85	90	95
Arg Lys Asp Ala Ser Thr Ser Met Thr Met Glu Asn Ser Leu Ile Leu		
100	105	110
Glu Asp Pro Phe Glu Cys Asn Asp Ser Gly Glu Asp Cys Thr His Ser		
115	120	125
Ser Thr Ile Thr Gln Arg Leu Leu Thr His Ser Gly Lys Lys Pro Tyr		
130	135	140
Val Ser Lys Gln Cys Gly Lys Ser Leu Arg Asn Leu Phe Ser Pro Lys		
145	150	155
Pro His Lys Gln Ile His Thr Lys Gly Lys Ser Tyr Gln Cys Asn Leu		
165	170	175
Cys Glu Lys Ala Tyr Thr Asn Cys Phe Arg Leu Arg Arg His Lys Met		
180	185	190
Thr His Thr Gly Glu Arg Pro Tyr Ala Cys His Leu Cys Gly Lys Ala		
195	200	205
Phe Thr Gln Cys Ser His Leu Arg Arg His Glu Lys Thr His Thr Gly		
210	215	220
Glu Arg Pro Tyr Lys Cys His Gln Cys Gly Lys Ala Phe Ile Gln Ser		
225	230	235
Phe Asn Leu Arg Arg His Glu Arg Thr His Leu Gly Lys Lys Cys Tyr		
245	250	255
Glu Cys Asp Lys Ser Gly Lys Ala Phe Ser Gln Ser Ser Gly Phe Arg		
260	265	270
Gly Asn Lys Ile Ile His Thr Gly Glu Lys Pro His Ala Cys Leu Leu		
275	280	285
Cys Gly Lys Ala Phe Ser Leu Ser Ser Asp Leu Arg		
290	295	300

<210> 4901

<211> 1216

<212> PRT

<213> Homo sapiens

<400> 524

Met Ser Gln Ala Gly Asp Val Glu Gly Pro Ser Thr Gly Asp Pro Val
 1 5 10 15
 Leu Ser Pro Gln His Asn Cys Glu Leu Leu Gln Asn Met Glu Gly Ala
 20 25 30
 Ser Ser Met Pro Gly Leu Ser Pro Asp Gly Pro Gly Ala Ser Ser Gly
 35 40 45
 Pro Gly Val Arg Ala Gly Ser Arg Arg Lys Ile Pro Arg Lys Glu Ala
 50 55 60
 Leu Arg Gly Gly Ser Ser Arg Ala Ala Gly Ala Ala Glu Val Arg Pro
 65 70 75 80
 Gly Val Leu Glu Leu Leu Ala Val Val Gln Ser Arg Gly Ser Met Leu
 85 90 95
 Ala Pro Gly Leu His Met Gln Leu Pro Ser Val Pro Thr Gln Gly Arg
 100 105 110
 Ala Leu Thr Ser Lys Arg Leu Gln Val Ser Leu Cys Asp Ile Leu Asp
 115 120 125
 Asp Ser Cys Pro Arg Lys Leu Cys Ser Arg Ser Ala Gly Leu Pro Glu
 130 135 140
 Arg Ala Leu Ala Cys Arg Glu Arg Leu Ala Gly Val Glu Glu Val Ser
 145 150 155 160
 Cys Leu Arg Pro Arg Glu Ala Arg Asp Gly Gly Met Ser Ser Pro Gly
 165 170 175
 Cys Asp Arg Arg Ser Pro Thr Leu Ser Lys Glu Glu Pro Pro Gly Arg
 180 185 190
 Pro Leu Thr Ser Ser Pro Asp Pro Val Pro Val Arg Val Arg Lys Lys
 195 200 205
 Trp Arg Arg Gln Gly Ala His Ser Glu Cys Glu Glu Gly Ala Gly Asp
 210 215 220
 Phe Leu Trp Leu Asp Gln Ser Pro Arg Gly Asp Asn Leu Leu Ser Val
 225 230 235 240
 Gly Asp Pro Pro Gln Val Ala Asp Leu Glu Ser Leu Gly Gly Pro Cys
 245 250 255
 Arg Pro Pro Ser Pro Lys Asp Thr Gly Ser Gly Pro Gly Glu Pro Gly

260	265	270
Gly Ser Gly Ala Gly Cys Ala Ser Gly Thr Glu Lys Phe Gly Tyr Leu		
275	280	285
Pro Ala Thr Gly Asp Gly Pro Gln Pro Gly Ser Pro Cys Gly Pro Val		
290	295	300
Gly Phe Pro Val Pro Ser Gly Gly Glu Ser Leu Ser Ser Ala Ala Gln		
305	310	315
Ala Pro Pro Gln Ser Ala Ala Leu Cys Leu Gly Ala Ser Ala Gln Ala		
325	330	335
Ser Ala Glu Gln Gln Glu Ala Val Cys Val Val Arg Thr Gly Ser Asp		
340	345	350
Glu Gly Gln Ala Pro Ala Gln Asp Gln Glu Glu Leu Glu Ala Lys Ala		
355	360	365
Gln Pro Ala Ser Arg Gly Arg Leu Glu Gln Gly Leu Ala Ala Pro Ala		
370	375	380
Asp Thr Cys Ala Ser Ser Arg Glu Pro Leu Gly Gly Leu Ser Ser Ser		
385	390	395
Leu Asp Thr Glu Ala Ser Arg Ala Cys Ser Gly Pro Phe Met Glu Gln		
405	410	415
Arg Arg Ser Lys Gly Thr Lys Asn Leu Lys Lys Gly Pro Val Pro Cys		
420	425	430
Ala Gln Asp Arg Gly Thr Asp Arg Ser Ser Asp Asn Ser His Gln Asp		
435	440	445
Arg Pro Glu Glu Pro Ser Pro Gly Gly Cys Pro Arg Leu Glu Glu Val		
450	455	460
Lys Ile Pro His Gly Val Lys Leu Val Cys Tyr Leu Gly Ser Gly Pro		
465	470	475
Val Ile Gln Leu Leu Gly Ala Ile Ser His Gly Gln Ala Gly Gly Gln		
485	490	495
Leu Pro Pro Lys Leu Glu Val Leu Glu Asp Leu Met Glu Val Ser Ser		
500	505	510
Pro Ser Pro Ala Gln Arg Leu Arg Arg Lys Lys Arg Pro Met Val Gln		
515	520	525
Gly Pro Ala Gly Cys Gln Val Phe Gln Pro Ser Pro Ser Gly Gly Thr		
530	535	540
Ala Gly Asp Pro Gly Gly Leu Ser Asp Pro Phe Tyr Pro Pro Arg Ser		

545	550	555	560
Gly Ser Leu Ala Leu Gly Asp Pro Ser Ser Asp Pro Ala Cys Ser Gln			
	565	570	575
Ser Gly Pro Met Glu Ala Glu Glu Asp Ser Leu Pro Glu Gln Pro Glu			
	580	585	590
Asp Ser Ala Gln Leu Gln Gln Glu Lys Pro Ser Leu Tyr Ile Gly Val			
	595	600	605
Arg Gly Thr Val Val Arg Ser Met Gln Glu Val Leu Trp Thr Arg Leu			
	610	615	620
Arg Glu Leu Pro Asp Pro Val Leu Ser Glu Glu Val Val Glu Gly Ile			
625	630	635	640
Ala Ala Gly Ile Glu Ala Ala Leu Trp Asp Leu Thr Gln Gly Thr Asn			
	645	650	655
Gly Arg Tyr Lys Thr Lys Tyr Arg Ser Leu Leu Phe Asn Leu Arg Asp			
	660	665	670
Pro Arg Asn Leu Asp Leu Phe Leu Lys Val Val His Gly Asp Val Thr			
	675	680	685
Pro Tyr Asp Leu Val Arg Met Ser Ser Met Gln Leu Ala Pro Gln Glu			
	690	695	700
Leu Ala Arg Trp Arg Asp Gln Glu Glu Lys Arg Gly Leu Asn Ile Ile			
705	710	715	720
Glu Gln Gln Gln Lys Glu Pro Cys Arg Leu Pro Ala Ser Lys Met Thr			
	725	730	735
His Lys Gly Glu Val Glu Ile Gln Arg Asp Met Asp Gln Thr Leu Thr			
	740	745	750
Leu Glu Asp Leu Val Gly Pro Gln Met Phe Met Asp Cys Ser Pro Gln			
	755	760	765
Ala Leu Pro Ile Ala Ser Glu Asp Thr Thr Gly Gln His Asp His His			
	770	775	780
Phe Leu Asp Pro Asn Cys His Ile Cys Lys Asp Trp Glu Pro Ser Asn			
785	790	795	800
Glu Leu Leu Gly Ser Phe Glu Ala Ala Lys Ser Cys Gly Asp Asn Ile			
	805	810	815
Phe Gln Lys Ala Leu Ser Gln Thr Pro Met Pro Ala Pro Glu Met Pro			
	820	825	830
Lys Thr Arg Glu Leu Ser Pro Thr Glu Pro Gln Asp Arg Val Pro Pro			

835	840	845
Ser Gly Leu His Val Pro Ala	Ala Pro Thr Lys Ala	Leu Pro Cys Leu
850	855	860
Pro Pro Trp Glu Gly Val Leu	Asp Met Phe Ser Ile Lys	Arg Phe Arg
865	870	875
Ala Arg Ala Gln Leu Val Ser	Gly His Ser Cys Arg	Leu Val Gln Ala
885	890	895
Leu Pro Thr Val Ile Arg Ser	Ala Gly Cys Ile Pro Ser	Asn Ile Val
900	905	910
Trp Asp Leu Leu Ala Ser Ile	Cys Pro Ala Lys Ala Lys	Asp Val Cys
915	920	925
Val Val Arg Leu Cys Pro His	Gly Ala Arg Asp Thr Gln	Asn Cys Arg
930	935	940
Leu Leu Tyr Ser Tyr Leu Asn	Asp Arg Gln Arg His Gly	Leu Ala Ser
945	950	955
Val Glu His Met Gly Met Val	Leu Leu Pro Leu Pro Ala	Phe Gln Pro
965	970	975
Leu Pro Thr Arg Leu Arg Pro	Leu Gly Gly Pro Gly Leu	Trp Ala Leu
980	985	990
Pro Val Ser Pro Leu Leu Ser	Pro Gly Leu Glu Val Thr	His Ser Ser
995	1000	1005
Leu Leu Leu Ala Val Leu Leu	Pro Lys Glu Gly Leu Pro	Asp Thr Ala
1010	1015	1020
Gly Ser Ser Pro Trp Leu Gly	Lys Val Gln Lys Met Val	Ser Phe Asn
1025	1030	1035
Ser Lys Val Glu Lys Arg Tyr	Tyr Gln Pro Asp Asp Arg	Arg Pro Asn
1045	1050	1055
Val Pro Leu Lys Gly Thr Pro	Pro Pro Gly Gly Ala Trp	Gln Gln Ser
1060	1065	1070
Gln Gly Arg Gly Ser Ile Ala	Pro Arg Gly Ile Ser Ala	Trp Gln Arg
1075	1080	1085
Pro Pro Arg Gly Arg Gly Arg	Leu Trp Pro Glu Pro Glu	Asn Trp Gln
1090	1095	1100
His Pro Gly Arg Gly Gln Trp	Pro Pro Glu Pro Gly Leu	Arg Gln Ser
1105	1110	1115
Gln His Pro Tyr Ser Val Ala	Pro Ala Gly His Gly Phe	Gly Arg Gly

	1125	1130	1135
Gln His Phe His Arg Asp Ser Cys Pro His Gln Ala Leu Leu Arg His			
1140	1145	1150	
Leu Glu Ser Leu Ala Thr Met Ser His Gln Leu Gln Ala Leu Leu Cys			
1155	1160	1165	
Pro Gln Thr Lys Ser Ser Ile Pro Arg Pro Leu Gln Arg Leu Ser Ser			
1170	1175	1180	
Ala Leu Ala Ala Pro Glu Pro Pro Gly Pro Ala Arg Asp Ser Ser Leu			
1185	1190	1195	1200
Gly Pro Thr Asp Glu Ala Gly Ser Glu Cys Pro Phe Pro Arg Lys Ala			
1205	1210	1215	

<210> 4902

<211> 435

<212> PRT

<213> Homo sapiens

<400> 525

Met Arg Lys Leu Leu Thr Asn Leu Pro Ala Ala Ala Val Leu Ser Ala			
1	5	10	15
Gln Val Tyr Ser Ala Val Leu Arg Gly Leu Trp Glu Glu Asn Val Cys			
20	25	30	
Gly Thr Pro Gly Arg Thr Arg Val Cys Thr Ala Leu Leu Tyr Gly Gln			
35	40	45	
Val Cys Pro Phe Gln Asp Ser Thr Asp Gly Leu Arg Thr Ile Thr Ser			
50	55	60	
Ile Leu Phe Asn Trp Pro Pro Glu Asn Thr Ser Val Tyr Tyr Gln Pro			
65	70	75	80
Pro Gln Arg Ser Ser Phe Arg Ile Lys Leu Ala Phe Arg Asn Leu Ser			
85	90	95	
Trp Pro Gly Leu Gly Leu Glu Asp His Gln Glu Ile Val Leu Gly Gln			
100	105	110	
Leu Val Leu Pro Glu Pro Asn Glu Ala Lys Pro Asp Asp Pro Ala Pro			
115	120	125	
Arg Pro Gly Gln His Ala Leu Thr Met Pro Ala Leu Glu Pro Ala Pro			

130	135	140	
Pro Leu Leu Ala Asp Leu Gly Pro Ala Leu Glu Pro Glu Ser Pro Ala			
145	150	155	160
Ala Leu Gly Pro Pro Gly Tyr Leu His Ser Ala Pro Gly Pro Ala Pro			
	165	170	175
Ala Pro Gly Glu Glu Pro Pro Pro Gly Thr Val Leu Glu Pro Gln Ser			
	180	185	190
Ala Pro Glu Ser Ser Cys Pro Cys Arg Gly Ser Val Lys Asn Gln Pro			
195	200	205	
Ser Glu Glu Leu Pro Asp Met Thr Thr Phe Pro Pro Arg Leu Leu Ala			
210	215	220	
Glu Gln Leu Thr Leu Met Asp Ala Glu Leu Phe Lys Lys Val Val Leu			
225	230	235	240
Tyr Glu Cys Leu Gly Cys Ile Trp Gly Gln Gly His Leu Lys Gly Asn			
	245	250	255
Glu His Met Ala Pro Thr Val Arg Ala Thr Ile Ala His Phe Asn Arg			
	260	265	270
Leu Thr Asn Cys Ile Thr Thr Ser Cys Leu Gly Asp His Ser Met Arg			
275	280	285	
Ala Arg Asp Arg Ala Arg Val Val Glu His Trp Ile Lys Val Ala Arg			
290	295	300	
Glu Cys Leu Ser Leu Asn Asn Phe Ser Ser Val His Val Ile Val Ser			
305	310	315	320
Ala Leu Cys Ser Asn Pro Ile Gly Gln Leu His Lys Thr Trp Ala Gly			
	325	330	335
Val Ser Ser Lys Ser Met Lys Glu Leu Lys Glu Leu Cys Lys Lys Asp			
	340	345	350
Thr Ala Val Lys Arg Asp Leu Leu Ile Lys Arg Asp Asp Gly Glu Asn			
	355	360	365
Asn Gly Asn Ser Tyr Arg Lys Leu Ser Pro Gln Arg Pro Cys Glu Val			
370	375	380	
Ala Val Val Cys Ile Thr Leu Tyr Arg Arg Gly Asn Ser Leu Arg Glu			
385	390	395	400
Ala Arg Leu Gln Asp Trp Val Thr His Thr Gly Ser Val Asp Leu Gly			
	405	410	415
Gln Trp Arg Gly Ala Leu Arg Trp Pro Pro Arg Arg Gly Thr Pro Arg			

420 425 430
 Glu Pro Arg
 435

<210> 4903

<211> 171

<212> PRT

<213> Homo sapiens

<400> 526

Met Gly Lys Ser Glu Ile Lys Arg Thr Gly Gly Phe Gly Ser Thr Asn
 1 5 10 15
 Lys Gln Gly Lys Ala Ala Tyr Trp Val Asn Gln Ile Thr Asp Lys Cys
 20 25 30
 Pro Thr Cys Glu Ile Thr Ile Gln Gly Lys Lys Phe Lys Gly Leu Val
 35 40 45
 Asp Thr Arg Ala Asp Ile Ser Ile Ile Ser Leu Gln His Trp Pro Ser
 50 55 60
 Thr Trp Pro Ile Gln Pro Thr Gln Phe Asn Ile Val Gly Val Gly Glu
 65 70 75 80
 Ala Pro Glu Val Tyr Gln Ser Ser Ser Val Leu Pro Cys Glu Gly Pro
 85 90 95
 Asp Gly Gln Pro Glu Thr Ile Gln Pro Ile Ile Thr Ser Val Ser Ile
 100 105 110
 Asn Leu Trp Gly Arg Asp Leu Leu Gln Gln Cys Arg Ala Gln Val Leu
 115 120 125
 Ile Pro Glu Gln Leu Tyr Ser Pro Gln Ser Gln His Met Met His Glu
 130 135 140
 Met Gly Tyr Val Pro Gly Met Gly Leu Gln Lys Asn Leu Gln Gly Leu
 145 150 155 160
 Lys Ser Ser Arg Gln Arg Leu Gly Asn Asn Phe
 165 170

<210> 4904

<211> 599

<212> PRT

<213> Homo sapiens

<400> 527

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Met Asp Pro Pro Met Asp Asp Gln Pro Gly Glu Lys Glu Leu Val Lys
  1             5             10             15
Arg Ser Gln Leu Asp Gly Glu Gly Asp Gly Pro Leu Ser Asn Gln Leu
      20             25             30
Ser Ala Ser Ser Thr Ile Asn Pro Val Pro Leu Val Gly Leu Gln Lys
      35             40             45
Pro Glu Met Ser Leu Pro Val Lys Pro Gly Gln Gly Asp Ser Glu Ala
      50             55             60
Ser Ser Pro Phe Thr Pro Val Ala Asp Glu Asp Ser Val Val Phe Ser
      65             70             75             80
Lys Leu Thr Tyr Leu Gly Cys Ala Ser Val Asn Ala Pro Arg Ser Glu
      85             90             95
Val Glu Ala Leu Arg Met Met Ser Ile Leu Arg Ser Gln Cys Gln Ile
      100            105            110
Ser Leu Asp Val Thr Leu Ser Val Pro Asn Val Ser Glu Gly Ile Val
      115            120            125
Arg Leu Leu Asp Pro Gln Thr Asn Thr Glu Ile Ala Asn Tyr Pro Ile
      130            135            140
Tyr Lys Ile Leu Phe Cys Val Arg Gly His Asp Gly Thr Pro Glu Ser
      145            150            155            160
Asp Cys Phe Ala Phe Thr Glu Ser His Tyr Asn Ala Glu Leu Phe Arg
      165            170            175
Ile His Val Phe Arg Cys Glu Ile Gln Glu Ala Val Ser Arg Ile Leu
      180            185            190
Tyr Ser Phe Ala Thr Ala Phe Arg Arg Ser Ala Lys Gln Thr Pro Leu
      195            200            205
Ser Ala Thr Ala Ala Pro Gln Thr Pro Asp Ser Asp Ile Phe Thr Phe
      210            215            220
Ser Val Ser Leu Glu Ile Lys Glu Asp Asp Gly Lys Gly Tyr Phe Ser
      225            230            235            240
Ala Val Pro Lys Asp Lys Asp Arg Gln Cys Phe Lys Leu Arg Gln Gly

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	245		250		255
Ile Asp Lys Lys Ile Val Ile Tyr Val Gln Gln Thr Thr Asn Lys Glu					
	260		265		270
Leu Ala Ile Glu Arg Cys Phe Gly Leu Leu Leu Ser Pro Gly Lys Asp					
	275		280		285
Val Arg Asn Ser Asp Met His Leu Leu Asp Leu Glu Ser Met Gly Lys					
	290		295		300
Ser Ser Asp Gly Lys Ser Tyr Val Ile Thr Gly Ser Trp Asn Pro Lys					
305		310		315	320
Ser Pro His Phe Gln Val Val Asn Glu Glu Thr Pro Lys Asp Lys Val					
	325		330		335
Leu Phe Met Thr Thr Ala Val Asp Leu Val Ile Thr Glu Val Gln Glu					
	340		345		350
Pro Val Arg Phe Leu Leu Glu Thr Lys Val Arg Val Cys Ser Pro Asn					
	355		360		365
Glu Arg Leu Phe Trp Pro Phe Ser Lys Arg Ser Thr Thr Glu Asn Phe					
370		375		380	
Phe Leu Lys Leu Lys Gln Ile Lys Gln Arg Glu Arg Lys Asn Asn Thr					
385		390		395	400
Asp Thr Leu Tyr Glu Val Val Cys Leu Glu Ser Glu Ser Glu Arg Glu					
	405		410		415
Arg Arg Lys Thr Thr Ala Ser Pro Ser Val Arg Leu Pro Gln Ser Gly					
	420		425		430
Ser Gln Ser Ser Val Ile Pro Ser Pro Pro Glu Asp Asp Glu Glu Glu					
	435		440		445
Asp Asn Asp Glu Pro Leu Leu Ser Gly Ser Gly Asp Val Ser Lys Glu					
	450		455		460
Cys Ala Glu Lys Ile Leu Glu Thr Trp Gly Glu Leu Leu Ser Lys Trp					
465		470		475	480
His Leu Asn Leu Asn Val Arg Pro Lys Gln Leu Ser Ser Leu Val Arg					
	485		490		495
Asn Gly Val Pro Glu Ala Leu Arg Gly Glu Val Trp Gln Leu Leu Ala					
	500		505		510
Gly Cys His Asn Asn Asp His Leu Val Glu Lys Tyr Arg Ile Leu Ile					
	515		520		525
Thr Lys Glu Ser Pro Gln Asp Ser Ala Ile Thr Arg Asp Ile Asn Arg					

530 535 540
 Thr Phe Pro Ala His Asp Tyr Phe Lys Asp Thr Gly Gly Asp Gly Gln
 545 550 555 560
 Asp Ser Leu Tyr Lys Ile Cys Lys Val Phe His Val Lys Lys Lys Lys
 565 570 575
 Asp Ser Ile Leu Ser Gly Gly Ser Thr Leu Lys Leu His Lys Lys Gln
 580 585 590
 Leu Gln Ser Val Ile Cys Ile
 595

<210> 4905

<211> 1340

<212> PRT

<213> Homo sapiens

<400> 528

Met Leu Arg Lys Gly Ala Asn Arg Tyr Leu Thr Val Lys Lys Lys Asp
 1 5 10 15
 Gly Ser Glu Thr Ala His Ala Met Met Thr Cys Asn Leu Thr His Asn
 20 25 30
 Thr Lys His Ala Val Arg Ser Leu Ile Gln Arg Phe Pro Val Thr Asn
 35 40 45
 Lys Glu Arg Thr Glu Leu Leu Pro Lys Thr Glu Arg Gly Asn Val Phe
 50 55 60
 Ala Val Glu Ala Glu Asn Arg Glu Met Ser Lys Thr Ser Gly Arg Leu
 65 70 75 80
 Asn Asn Gly Ile Pro Gln Ile Pro Val Lys Arg Gly Glu Ser Glu Phe
 85 90 95
 Asp Ser Phe Arg Gln Ser Leu Pro Val Phe Glu Lys Gln Glu Glu Ile
 100 105 110
 Val Lys Ile Ile Lys Glu Asn Lys Val Val Leu Ile Val Gly Glu Thr
 115 120 125
 Gly Ser Gly Lys Thr Thr Gln Ile Pro Gln Phe Leu Leu Asp Asp Cys
 130 135 140
 Phe Lys Asn Gly Ile Pro Cys Arg Ile Phe Cys Thr Gln Pro Arg Arg

145	150	155	160
Leu Ala Ala Ile Ala Val Ala Glu Arg Val Ala Ala Glu Arg Arg Glu			
	165	170	175
Arg Ile Gly Gln Thr Ile Gly Tyr Gln Ile Arg Leu Glu Ser Arg Val			
	180	185	190
Ser Pro Lys Thr Leu Leu Thr Phe Cys Thr Asn Gly Val Leu Leu Arg			
	195	200	205
Thr Leu Met Ala Gly Asp Ser Thr Leu Ser Thr Val Thr His Val Ile			
	210	215	220
Val Asp Glu Val His Glu Arg Asp Arg Phe Ser Asp Phe Leu Leu Thr			
225	230	235	240
Lys Leu Arg Asp Leu Leu Gln Lys His Pro Thr Leu Lys Leu Ile Leu			
	245	250	255
Ser Ser Ala Ala Leu Asp Val Asn Leu Phe Ile Arg Tyr Phe Gly Ser			
	260	265	270
Cys Pro Val Ile Tyr Ile Gln Gly Arg Pro Phe Glu Val Lys Glu Met			
	275	280	285
Phe Leu Glu Asp Ile Leu Arg Thr Thr Gly Tyr Thr Asn Lys Glu Met			
	290	295	300
Leu Lys Tyr Lys Lys Glu Lys Gln Gln Glu Glu Lys Gln Gln Thr Thr			
305	310	315	320
Leu Thr Glu Trp Tyr Ser Ala Gln Glu Asn Ser Phe Lys Pro Glu Ser			
	325	330	335
Gln Arg Gln Arg Thr Val Leu Asn Val Thr Asp Glu Tyr Asp Leu Leu			
	340	345	350
Asp Asp Gly Gly Asp Ala Val Phe Ser Gln Leu Thr Glu Lys Asp Val			
	355	360	365
Asn Cys Leu Glu Pro Trp Leu Ile Lys Glu Met Asp Ala Cys Leu Ser			
	370	375	380
Asp Ile Trp Leu His Lys Asp Ile Asp Ala Phe Ala Gln Val Phe His			
385	390	395	400
Leu Ile Leu Thr Glu Asn Val Ser Val Asp Tyr Arg His Ser Glu Thr			
	405	410	415
Ser Ala Thr Ala Leu Met Val Ala Ala Gly Arg Gly Phe Ala Ser Gln			
	420	425	430
Val Glu Gln Leu Ile Ser Met Gly Ala Asn Val His Ser Lys Ala Ser			

435	440	445
Asn Gly Trp Met Ala Leu Asp Trp Ala Lys His Phe Gly Gln Thr Glu		
450	455	460
Ile Val Asp Leu Leu Glu Ser Tyr Ser Ala Ser Leu Glu Phe Gly Asn		
465	470	475
Leu Asp Glu Ser Ser Leu Val Gln Thr Asn Gly Ser Asp Leu Ser Ala		
485	490	495
Glu Asp Arg Glu Leu Leu Lys Ala Tyr His His Ser Phe Asp Asp Glu		
500	505	510
Lys Val Asp Leu Asp Leu Ile Met His Leu Leu Tyr Asn Ile Cys His		
515	520	525
Ser Cys Asp Ala Gly Ala Val Leu Ile Phe Leu Pro Gly Tyr Asp Glu		
530	535	540
Ile Val Gly Leu Arg Asp Arg Ile Leu Phe Asp Asp Lys Arg Phe Ala		
545	550	555
Asp Asn Thr His Arg Tyr Gln Val Phe Met Leu His Ser Asn Met Gln		
565	570	575
Thr Ser Asp Gln Lys Lys Val Leu Lys Asn Pro Pro Ala Gly Val Arg		
580	585	590
Lys Ile Ile Leu Ser Thr Asn Ile Ala Glu Thr Ser Ile Thr Val Asn		
595	600	605
Asp Val Val Phe Val Ile Asp Ser Gly Lys Val Lys Glu Lys Ser Phe		
610	615	620
Asp Ala Leu Asn Phe Val Thr Met Leu Lys Met Val Trp Ile Ser Lys		
625	630	635
Ala Ser Ala Ile Gln Arg Lys Gly Arg Ala Gly Arg Cys Arg Pro Gly		
645	650	655
Ile Cys Phe Arg Leu Phe Ser Arg Leu Arg Phe Gln Asn Met Leu Glu		
660	665	670
Phe Gln Thr Pro Glu Leu Leu Arg Met Pro Leu Gln Glu Leu Cys Leu		
675	680	685
His Thr Lys Leu Leu Ala Pro Val Asn Cys Pro Ile Ala Asp Phe Leu		
690	695	700
Met Lys Ala Pro Glu Pro Pro Pro Ala Leu Ile Val Arg Asn Ala Val		
705	710	715
Gln Met Leu Lys Thr Ile Asp Ala Met Asp Thr Trp Glu Asp Leu Thr		

	725		730		735										
Glu	Leu	Gly	Tyr	His	Leu	Ala	Asp	Leu	Pro	Val	Glu	Pro	His	Leu	Gly
	740		745		750										
Lys	Met	Val	Leu	Cys	Ala	Val	Val	Leu	Lys	Cys	Leu	Asp	Pro	Ile	Leu
	755		760		765										
Thr	Ile	Ala	Cys	Thr	Leu	Ala	Tyr	Arg	Asp	Pro	Phe	Val	Leu	Pro	Thr
	770		775		780										
Gln	Ala	Ser	Gln	Lys	Arg	Ala	Ala	Met	Leu	Cys	Arg	Lys	Arg	Phe	Thr
	785		790		795										
Ala	Gly	Ala	Phe	Ser	Asp	His	Met	Ala	Leu	Leu	Arg	Ala	Phe	Gln	Ala
			805						810					815	
Trp	Gln	Lys	Ala	Arg	Ser	Asp	Gly	Trp	Glu	Arg	Ala	Phe	Cys	Glu	Lys
	820							825					830		
Asn	Phe	Leu	Ser	Gln	Ala	Thr	Met	Glu	Ile	Ile	Ile	Gly	Met	Arg	Thr
	835						840						845		
Gln	Leu	Leu	Gly	Gln	Leu	Arg	Ala	Ser	Gly	Phe	Val	Arg	Ala	Arg	Gly
	850					855							860		
Gly	Gly	Asp	Ile	Arg	Asp	Val	Asn	Thr	Asn	Ser	Glu	Asn	Trp	Ala	Val
	865				870					875				880	
Val	Lys	Ala	Ala	Leu	Val	Ala	Gly	Met	Tyr	Pro	Asn	Leu	Val	His	Val
			885							890				895	
Asp	Arg	Glu	Asn	Leu	Val	Leu	Thr	Gly	Pro	Lys	Glu	Lys	Lys	Val	Arg
	900								905					910	
Phe	His	Pro	Ala	Ser	Val	Leu	Ser	Gln	Pro	Gln	Tyr	Lys	Lys	Ile	Pro
	915							920						925	
Pro	Ala	Asn	Gly	Gln	Ala	Ala	Ala	Ile	Lys	Ala	Leu	Pro	Thr	Asp	Trp
	930					935							940		
Leu	Ile	Tyr	Asp	Glu	Met	Thr	Arg	Ala	His	Arg	Ile	Ala	Asn	Ile	Arg
	945				950					955				960	
Cys	Cys	Ser	Ala	Val	Thr	Pro	Val	Thr	Ile	Leu	Val	Phe	Cys	Gly	Pro
			965						970					975	
Ala	Arg	Leu	Ala	Ser	Asn	Ala	Leu	Gln	Glu	Pro	Ser	Ser	Phe	Arg	Val
	980							985						990	
Asp	Gly	Ile	Pro	Asn	Asp	Ser	Ser	Asp	Ser	Glu	Met	Glu	Asp	Lys	Thr
	995					1000								1005	
Thr	Ala	Asn	Leu	Ala	Ala	Leu	Lys	Leu	Asp	Glu	Trp	Leu	His	Phe	Thr

1010	1015	1020	
Leu Glu Pro Glu Ala Ala Ser Leu Leu Leu Gln Leu Arg Gln Lys Trp			
1025	1030	1035	1040
His Ser Leu Phe Leu Arg Arg Met Arg Ala Pro Ser Lys Pro Trp Ser			
	1045	1050	1055
Gln Val Asp Glu Ala Thr Ile Arg Ala Ile Ile Ala Val Leu Ser Thr			
	1060	1065	1070
Glu Glu Gln Ser Ala Gly Leu Gln Gln Pro Ser Gly Ile Gly Gln Arg			
	1075	1080	1085
Pro Arg Pro Met Ser Ser Glu Glu Leu Pro Leu Ala Ser Ser Trp Arg			
	1090	1095	1100
Ser Asn Asn Ser Arg Lys Ser Ser Ala Asp Thr Glu Phe Ser Asp Glu			
1105	1110	1115	1120
Cys Thr Thr Ala Glu Arg Val Leu Met Lys Ser Pro Ser Pro Ala Leu			
	1125	1130	1135
His Pro Pro Gln Lys Tyr Lys Asp Arg Gly Ile Leu His Pro Lys Arg			
	1140	1145	1150
Gly Thr Glu Asp Arg Ser Asp Gln Ser Ser Leu Lys Ser Thr Asp Ser			
	1155	1160	1165
Ser Ser Tyr Pro Ser Pro Cys Ala Ser Pro Ser Pro Pro Ser Ser Gly			
	1170	1175	1180
Lys Gly Ser Lys Ser Pro Ser Pro Arg Pro Asn Met Pro Val Arg Tyr			
1185	1190	1195	1200
Phe Ile Met Lys Ser Ser Asn Leu Arg Asn Leu Glu Ile Ser Gln Gln			
	1205	1210	1215
Lys Gly Ile Trp Ser Thr Thr Pro Ser Asn Glu Arg Lys Leu Asn Arg			
	1220	1225	1230
Ala Phe Trp Glu Ser Ser Ile Val Tyr Leu Val Phe Ser Val Gln Gly			
	1235	1240	1245
Ser Gly His Phe Gln Gly Phe Ser Arg Met Ser Ser Glu Ile Gly Arg			
	1250	1255	1260
Glu Lys Ser Gln Asp Trp Gly Ser Ala Gly Leu Gly Gly Val Phe Lys			
1265	1270	1275	1280
Val Glu Trp Ile Arg Lys Glu Ser Leu Pro Phe Gln Phe Ala His His			
	1285	1290	1295

Leu Leu Asn Pro Trp Asn Asp Asn Lys Lys Val Gln Ile Ser Arg Asp
 1300 1305 1310
 Gly Gln Glu Leu Glu Pro Gln Val Gly Glu Gln Leu Leu Gln Leu Trp
 1315 1320 1325
 Glu Arg Leu Pro Leu Gly Glu Lys Asn Thr Thr Asp
 1330 1335 1340

<210> 4906

<211> 574

<212> PRT

<213> Homo sapiens

<400> 529

Met Thr Ala Gly Ser Val Cys Val Pro Gln Ile Ile Pro Leu Arg Val
 1 5 10 15
 Pro Gln Pro Gly Lys Ala Asn His Glu Ile Asp Asn Asn Thr Leu Leu
 20 25 30
 Glu Met Lys Ser Asp Thr Pro Asp Val Asn Ile Tyr Tyr Thr Leu Asp
 35 40 45
 Gly Ser Lys Pro Glu Phe Leu Lys Arg Ile Gly Tyr Gly Glu Asn Asn
 50 55 60
 Thr Phe Lys Tyr Ile Lys Pro Ile Thr Leu Pro Asp Gly Lys Ile Gln
 65 70 75 80
 Val Lys Ala Ile Ala Val Ser Lys Asp Cys Arg Gln Ser Gly Ile Val
 85 90 95
 Thr Lys Val Phe His Val Asp Tyr Glu Pro Pro Asn Ile Val Ser Pro
 100 105 110
 Glu Asp Asn Val Glu Asn Val Leu Lys Asp Ser Ser Arg Gln Glu Phe
 115 120 125
 Lys Asn Gly Phe Val Gly Ser Lys Leu Lys Lys Lys Tyr Lys Asn Ser
 130 135 140
 Glu Asn Gln Arg Ser Trp Asn Val Asn Leu Arg Lys Phe Pro Glu Ser
 145 150 155 160
 Pro Leu Glu Ile Pro Ala Tyr Gly Gly Gly Ser Gly Ser Arg Pro Pro
 165 170 175

Thr Arg Gln Ser Gln Ser Pro Gly Phe Ala His Val Ser Gly Gln Lys			
180	185	190	
Cys Leu Thr Ser Thr Glu Ile Met Arg Ile Gln Arg Glu Thr Asp Phe			
195	200	205	
Leu Lys Cys Ala His Cys Leu Ala Pro Arg Pro Ser Asp Pro Phe Ala			
210	215	220	
Arg Phe Cys Gln Glu Cys Gly Ser Pro Val Pro Pro Ile Phe Gly Cys			
225	230	235	240
Arg Leu Pro Pro Pro Glu Gly Ala Gln Met Gly Leu Cys Ala Glu Cys			
245	250	255	
Arg Ser Leu Val Pro Met Asn Thr Pro Ile Cys Val Val Cys Glu Ala			
260	265	270	
Pro Leu Ala Leu Gln Leu Gln Pro Gln Ala Ser Leu His Leu Lys Glu			
275	280	285	
Lys Val Ile Cys Arg Ala Cys Gly Thr Gly Asn Pro Ala His Leu Arg			
290	295	300	
Tyr Cys Val Thr Cys Glu Gly Ala Leu Pro Ser Ser Gln Glu Ser Met			
305	310	315	320
Cys Ser Gly Asp Lys Ala Pro Pro Pro Pro Thr Gln Lys Gly Gly Thr			
325	330	335	
Ile Ser Cys Tyr Arg Cys Gly Arg Trp Asn Leu Trp Glu Ala Ser Phe			
340	345	350	
Cys Gly Trp Cys Gly Ala Met Leu Gly Ile Pro Ala Gly Cys Ser Val			
355	360	365	
Cys Pro Lys Cys Gly Ala Ser Asn His Leu Ser Ala Arg Phe Cys Gly			
370	375	380	
Ser Cys Gly Ile Cys Val Lys Ser Leu Val Lys Leu Ser Leu Asp Arg			
385	390	395	400
Ser Leu Ala Leu Ala Ala Glu Glu Pro Arg Pro Phe Ser Glu Ser Leu			
405	410	415	
Asn Ile Pro Leu Pro Arg Ser Asp Val Gly Thr Lys Arg Asp Ile Gly			
420	425	430	
Thr Gln Thr Val Gly Leu Phe Tyr Pro Ser Gly Lys Leu Leu Ala Lys			
435	440	445	
Lys Glu Gln Glu Leu Ala Ser Gln Lys Gln Arg Gln Glu Lys Met Ser			
450	455	460	

Asp His Lys Pro Leu Leu Thr Ala Ile Ser Pro Gly Arg Gly Tyr Trp
 465 470 475 480
 Arg Arg Gln Leu Asp His Ile Ser Ala His Leu Arg Cys Tyr Ala Gln
 485 490 495
 Asn Asn Pro Glu Phe Arg Ala Leu Ile Ala Glu Pro Arg Met Gly Lys
 500 505 510
 Leu Ile Ser Ala Thr Val His Glu Asp Gly Cys Glu Val Ser Ile Arg
 515 520 525
 Leu Asn Tyr Ser Gln Val Ser Asn Lys Val Arg Lys Leu Arg Leu Arg
 530 535 540
 Glu Val Lys Gln Pro Ala Ser Ser Lys Gly Thr Lys Leu Val Ser Gly
 545 550 555 560
 Arg Pro Arg Ile His Thr Trp Gln Pro Glu Thr Phe Pro Ser
 565 570

<210> 4907

<211> 534

<212> PRT

<213> Homo sapiens

<400> 530

Met Gly Val Pro Thr Ala Val Ser Ala Thr Pro Val Arg Ala Asp Ala
 1 5 10 15
 Ser Ser Lys Pro Gln Pro Leu Leu Gln Ser Gln Pro His Leu Phe Phe
 20 25 30
 Phe Pro Lys Leu Leu Ser Arg Leu Leu Gly Ser Pro Leu Pro Val His
 35 40 45
 Ser Ala Gly Pro Gly Pro Leu Leu Thr Arg Met Pro Gln Ala Thr Thr
 50 55 60
 Val Ser Leu Arg Leu Gly Ser Trp Ser Leu Thr Glu Asp Arg Asp Val
 65 70 75 80
 Ser Gly Glu Trp Pro Arg Ala Phe Pro Asp Thr Pro Pro Gly Met Thr
 85 90 95
 Thr Ser Val Phe Pro Val Ala Asp Ala Cys His Ser Val Lys Ser Leu
 100 105 110

Gln Arg Gln Pro Gly Ala Ser Pro Ser Gln Glu Arg Lys Pro Thr Gly
 115 120 125
 Val Ser Val Ile Tyr Trp Glu Arg Leu Leu Leu Gly Ser Arg Ser Asp
 130 135 140
 Gln Ala Ser Ile Ser Leu Arg Leu Thr Ser Pro Leu Arg Pro Pro Lys
 145 150 155 160
 Ser Ser Arg Pro Arg Glu Lys Thr Phe Thr Glu Tyr Arg Val Pro Gly
 165 170 175
 Arg Gln Pro Arg Thr Pro Glu Arg Gln Lys Pro Cys Ala Gln Glu Val
 180 185 190
 Pro Gly Arg Ala Phe Gly Asn Ala Ser Asp Leu Lys Ala Ala Ser Gly
 195 200 205
 Gly Arg Asp Arg Arg Met Gly Ala Ala Trp Gln Glu Pro His Arg Leu
 210 215 220
 Leu Gly Gly Gln Glu Pro Ser Thr Trp Asp Glu Leu Gly Glu Ala Leu
 225 230 235 240
 His Ala Gly Glu Lys Ser Phe Glu Cys Arg Ala Cys Ser Lys Val Phe
 245 250 255
 Val Lys Ser Ser Asp Leu Leu Lys His Leu Arg Thr His Thr Gly Glu
 260 265 270
 Arg Pro Tyr Glu Cys Thr Gln Cys Gly Lys Ala Phe Ser Gln Thr Ser
 275 280 285
 His Leu Thr Gln His Gln Arg Ile His Ser Gly Glu Thr Pro Tyr Ala
 290 295 300
 Cys Pro Val Cys Gly Lys Ala Phe Arg His Ser Ser Ser Leu Val Arg
 305 310 315 320
 His Gln Arg Ile His Thr Ala Glu Lys Ser Phe Arg Cys Ser Glu Cys
 325 330 335
 Gly Lys Ala Phe Ser His Gly Ser Asn Leu Ser Gln His Arg Lys Ile
 340 345 350
 His Ala Gly Gly Arg Pro Tyr Ala Cys Ala Gln Cys Gly Arg Arg Phe
 355 360 365
 Cys Arg Asn Ser His Leu Ile Gln His Glu Arg Thr His Thr Gly Glu
 370 375 380
 Lys Pro Phe Val Cys Ala Leu Arg Gly Ala Ala Phe Ser Gln Gly Ser
 385 390 395 400

Ser Leu Phe Leu His Gln Arg Val His Thr Gly Glu Lys Pro Phe Ala
 405 410 415
 Cys Ala Gln Cys Gly Arg Ser Phe Ser Arg Ser Ser Asn Leu Thr Gln
 420 425 430
 His Gln Leu Leu His Thr Gly Glu Arg Pro Phe Arg Cys Val Asp Cys
 435 440 445
 Gly Lys Gly Phe Ala Lys Gly Ala Val Leu Leu Ser His Arg Arg Ile
 450 455 460
 His Thr Gly Glu Lys Pro Phe Val Cys Thr Gln Cys Gly Arg Ala Phe
 465 470 475 480
 Arg Glu Arg Pro Ala Leu Leu His His Gln Arg Ile His Thr Thr Glu
 485 490 495
 Lys Thr Asn Ala Ala Ala Pro Asp Cys Thr Pro Gly Pro Gly Phe Leu
 500 505 510
 Gln Gly His His Arg Lys Val Arg Arg Gly Gly Lys Pro Ser Pro Val
 515 520 525
 Leu Lys Pro Ala Lys Val
 530

<210> 4908

<211> 1300

<212> PRT

<213> Homo sapiens

<400> 531

Met Pro Pro Asp Val Ile Arg Asp Ile Leu Glu Gly Val Leu Arg Leu
 1 5 10 15
 Met Gly Ile Phe Asp Thr Ser Trp Val Ser Met Lys Ser Phe Leu Ala
 20 25 30
 Lys Arg Gly Val Arg Glu Asp Ile Ala Thr Phe Asp Ala Arg Asn Ile
 35 40 45
 Ser Lys Glu Ile Arg Glu Ser Val Glu Glu Leu Leu Phe Lys Asn Lys
 50 55 60
 Gly Ser Phe Asp Pro Lys Asn Ala Lys Arg Ala Ser Thr Ala Ala Ala
 65 70 75 80

Pro Leu Ala Ala Trp Val Lys Ala Asn Ile Gln Tyr Ser His Val Leu
 85 90 95
 Glu Arg Ile His Pro Leu Glu Thr Glu Gln Ala Gly Leu Glu Ser Asn
 100 105 110
 Leu Lys Lys Thr Glu Asp Arg Lys Arg Lys Leu Glu Glu Leu Leu Asn
 115 120 125
 Ser Val Gly Gln Lys Val Ser Glu Leu Lys Glu Lys Phe Gln Ser Arg
 130 135 140
 Thr Ser Glu Ala Ala Lys Leu Glu Ala Glu Val Ser Lys Ala Gln Glu
 145 150 155 160
 Thr Ile Lys Ala Ala Glu Val Leu Ile Asn Gln Leu Asp Arg Glu His
 165 170 175
 Lys Arg Trp Asn Ala Gln Val Val Glu Ile Thr Glu Glu Leu Ala Thr
 180 185 190
 Leu Pro Lys Arg Ala Gln Leu Ala Ala Ala Phe Ile Thr Tyr Leu Ser
 195 200 205
 Ala Ala Pro Glu Ser Leu Arg Lys Thr Cys Leu Glu Glu Trp Thr Lys
 210 215 220
 Ser Ala Gly Leu Glu Lys Phe Asp Leu Arg Arg Phe Leu Cys Thr Glu
 225 230 235 240
 Ser Glu Gln Leu Ile Trp Lys Ser Glu Gly Leu Pro Ser Asp Asp Leu
 245 250 255
 Ser Ile Glu Asn Ala Leu Val Ile Leu Gln Ser Arg Val Cys Pro Phe
 260 265 270
 Leu Ile Asp Pro Ser Ser Gln Ala Thr Glu Trp Leu Lys Thr His Leu
 275 280 285
 Lys Asp Ser Arg Leu Glu Val Ile Asn Gln Gln Asp Ser Asn Phe Ile
 290 295 300
 Thr Ala Leu Glu Leu Ala Val Arg Phe Gly Lys Thr Leu Ile Ile Gln
 305 310 315 320
 Glu Met Asp Gly Val Glu Pro Val Leu Tyr Pro Leu Leu Arg Arg Asp
 325 330 335
 Leu Val Ala Gln Gly Pro Arg Tyr Val Val Gln Ile Gly Asp Lys Ile
 340 345 350
 Ile Asp Tyr Asn Glu Glu Phe Arg Leu Phe Leu Ser Thr Arg Asn Pro
 355 360 365

Asn Pro Phe Ile Pro Pro Asp Ala Ala Ser Ile Val Thr Glu Val Asn
 370 375 380
 Phe Thr Thr Thr Arg Ser Gly Leu Arg Gly Gln Leu Leu Ala Leu Thr
 385 390 395 400
 Ile Gln His Glu Lys Pro Asp Leu Glu Glu Gln Lys Thr Lys Leu Leu
 405 410 415
 Gln Gln Glu Glu Asp Lys Lys Ile Gln Leu Ala Lys Leu Glu Glu Ser
 420 425 430
 Leu Leu Glu Thr Leu Ala Thr Ser Gln Gly Asn Ile Leu Glu Asn Lys
 435 440 445
 Asp Leu Ile Glu Ser Leu Asn Gln Thr Lys Ala Ser Ser Ala Leu Ile
 450 455 460
 Gln Glu Ser Leu Lys Glu Ser Tyr Lys Leu Gln Ile Ser Leu Asp Gln
 465 470 475 480
 Glu Arg Asp Ala Tyr Leu Pro Leu Ala Glu Ser Ala Ser Lys Met Tyr
 485 490 495
 Phe Ile Ile Ser Asp Leu Ser Lys Ile Asn Asn Met Tyr Arg Phe Ser
 500 505 510
 Leu Ala Ala Phe Leu Arg Leu Phe Gln Arg Ala Leu Gln Asn Lys Gln
 515 520 525
 Asp Ser Glu Asn Thr Glu Gln Arg Ile Gln Ser Leu Ile Ser Ser Leu
 530 535 540
 Gln His Met Val Tyr Glu Tyr Ile Cys Arg Cys Leu Phe Lys Ala Asp
 545 550 555 560
 Gln Leu Met Phe Ala Leu His Phe Val Arg Gly Met His Pro Glu Leu
 565 570 575
 Phe Gln Glu Asn Glu Trp Asp Thr Phe Thr Gly Val Val Val Gly Asp
 580 585 590
 Met Leu Arg Lys Ala Asp Ser Gln Gln Lys Ile Arg Asp Gln Leu Pro
 595 600 605
 Ser Trp Ile Asp Gln Glu Arg Ser Trp Ala Val Ala Thr Leu Lys Ile
 610 615 620
 Ala Leu Pro Ser Leu Tyr Gln Thr Leu Cys Phe Glu Asp Ala Ala Leu
 625 630 635 640
 Trp Arg Thr Tyr Tyr Asn Asn Ser Met Cys Glu Gln Glu Phe Pro Ser
 645 650 655

Ile Leu Ala Lys Lys Val Ser Leu Phe Gln Gln Ile Leu Val Val Gln
 660 665 670
 Ala Leu Arg Pro Asp Arg Leu Gln Ser Ala Met Ala Leu Phe Ala Cys
 675 680 685
 Lys Thr Leu Gly Leu Lys Glu Val Ser Pro Leu Pro Leu Asn Leu Lys
 690 695 700
 Arg Leu Tyr Lys Glu Thr Leu Glu Ile Glu Pro Ile Leu Ile Ile Ile
 705 710 715 720
 Ser Pro Gly Ala Asp Pro Ser Gln Glu Leu Gln Glu Leu Ala Asn Ala
 725 730 735
 Glu Arg Ser Gly Glu Cys Tyr His Gln Val Ala Met Gly Gln Gly Gln
 740 745 750
 Ala Asp Leu Ala Ile Gln Met Leu Lys Glu Cys Ala Arg Asn Gly Asp
 755 760 765
 Trp Leu Cys Leu Lys Asn Leu His Leu Val Val Ser Trp Leu Pro Val
 770 775 780
 Leu Glu Lys Glu Leu Asn Thr Leu Gln Pro Lys Asp Thr Phe Arg Leu
 785 790 795 800
 Trp Leu Thr Ala Glu Val His Pro Asn Phe Thr Pro Ile Leu Leu Gln
 805 810 815
 Ser Ser Leu Lys Ile Thr Tyr Glu Ser Pro Pro Gly Leu Lys Lys Asn
 820 825 830
 Leu Met Arg Thr Tyr Glu Ser Trp Thr Pro Glu Gln Ile Ser Lys Lys
 835 840 845
 Asp Asn Thr His Arg Ala His Ala Leu Phe Ser Leu Ala Trp Phe His
 850 855 860
 Ala Ala Cys Gln Glu Arg Arg Asn Tyr Ile Pro Gln Gly Trp Thr Lys
 865 870 875 880
 Phe Tyr Glu Phe Ser Leu Ser Asp Leu Arg Ala Gly Tyr Asn Ile Ile
 885 890 895
 Asp Arg Leu Phe Asp Gly Ala Lys Asp Val Gln Trp Glu Phe Val His
 900 905 910
 Gly Leu Leu Glu Asn Ala Ile Tyr Gly Gly Arg Ile Asp Asn Tyr Phe
 915 920 925
 Asp Leu Arg Val Leu Gln Ser Tyr Leu Lys Gln Phe Phe Asn Ser Ser

930	935	940
Val Ile Asp Val Phe Asn Gln Arg Asn Lys Lys Ser Ile Phe Pro Tyr		
945	950	955
Ser Val Ser Leu Pro Gln Ser Cys Ser Ile Leu Asp Tyr Arg Ala Val		
965	970	975
Ile Glu Lys Ile Pro Glu Asp Asp Lys Pro Ser Phe Phe Gly Leu Pro		
980	985	990
Ala Asn Ile Ala Arg Ser Ser Gln Arg Met Ile Ser Ser Gln Val Ile		
995	1000	1005
Ser Gln Leu Arg Ile Leu Gly Arg Ser Ile Thr Ala Gly Ser Lys Phe		
1010	1015	1020
Asp Arg Glu Ile Trp Ser Asn Glu Leu Ser Pro Val Leu Asn Leu Trp		
1025	1030	1035
Lys Lys Leu Asn Gln Asn Ser Asn Leu Ile His Gln Lys Val Pro Pro		
1045	1050	1055
Pro Asn Asp Arg Gln Gly Ser Pro Ile Leu Ser Phe Ile Ile Leu Glu		
1060	1065	1070
Gln Phe Asn Ala Ile Arg Leu Val Gln Ser Val His Gln Ser Leu Ala		
1075	1080	1085
Ala Leu Ser Lys Val Ile Arg Gly Thr Thr Leu Leu Ser Ser Glu Val		
1090	1095	1100
Gln Lys Leu Ala Ser Ala Leu Leu Asn Gln Lys Cys Pro Leu Ala Trp		
1105	1110	1115
Gln Ser Lys Trp Glu Gly Pro Glu Asp Pro Leu Gln Tyr Leu Arg Gly		
1125	1130	1135
Leu Val Ala Arg Ala Leu Ala Ile Gln Asn Trp Val Asp Lys Ala Glu		
1140	1145	1150
Lys Gln Ala Leu Leu Ser Glu Thr Leu Asp Leu Ser Glu Leu Phe His		
1155	1160	1165
Pro Asp Thr Phe Leu Asn Ala Leu Arg Gln Glu Thr Ala Arg Ala Val		
1170	1175	1180
Gly Arg Ser Val Asp Ser Leu Lys Phe Val Ala Ser Trp Lys Gly Arg		
1185	1190	1195
Leu Gln Glu Ala Lys Leu Gln Ile Lys Ile Ser Gly Leu Leu Leu Glu		
1205	1210	1215
Gly Cys Ser Phe Asp Gly Asn Gln Leu Ser Glu Asn Gln Leu Asp Ser		

1220 1225 1230
 Pro Ser Val Ser Ser Val Leu Pro Cys Phe Met Gly Trp Ile Pro Gln
 1235 1240 1245
 Asp Ala Cys Gly Pro Tyr Ser Pro Asp Glu Cys Ile Ser Leu Pro Val
 1250 1255 1260
 Tyr Thr Ser Ala Glu Arg Asp Arg Val Val Thr Asn Ile Asp Val Pro
 1265 1270 1275 1280
 Cys Gly Gly Asn Gln Asp Gln Trp Ile Gln Cys Gly Ala Ala Leu Phe
 1285 1290 1295
 Leu Lys Asn Gln
 1300

<210> 4909

<211> 944

<212> PRT

<213> Homo sapiens

<400> 532

Met Gly Ser Asp Gly Ile Leu Arg Leu Ser Thr Ser Ala Leu Asn Asn
 1 5 10 15
 Glu Phe Phe Ala Tyr Ala Ala Gln Gly Trp Lys Gln Arg Leu Ala Glu
 20 25 30
 Gly Glu Phe Thr Pro Glu Met Gln Leu Arg Ile Arg Gln Glu Ile Glu
 35 40 45
 Lys Glu Lys Lys Thr Glu Pro Trp Lys Glu Lys Phe Phe Glu Arg Phe
 50 55 60
 Tyr Gly Glu Lys Leu Gly Met Ser Arg Glu Glu Ser Val Lys Leu Thr
 65 70 75 80
 Thr Gly Pro Asn Asn Ala Gly Ala Gln Ser Ser Ser Ser Cys Gly Thr
 85 90 95
 Ser Gly Leu Pro Val Ser Ala Gln Thr Ala Leu Ala Glu Gln Gln Pro
 100 105 110
 Lys Ser Met Lys Ser Pro Ala Ser Pro Glu Pro Gly Phe Cys Ala Thr
 115 120 125
 Leu Cys Pro Met Val Glu Ile Pro Pro Lys Asp Ile Met Ala Glu Leu

130	135	140	
Glu Ser Glu Asp Ile Leu Ile Pro Glu Glu Ser Val Ile Gln Glu Glu			
145	150	155	160
Ile Ala Glu Glu Val Glu Thr Ser Ile Cys Glu Cys Gln Asp Glu Asn			
165	170	175	
His Lys Thr Ile Pro Glu Phe Ser Glu Glu Ala Glu Ser Leu Thr Asn			
180	185	190	
Ser His Glu Glu Pro Gln Ile Ala Pro Pro Glu Asp Asn Leu Glu Ser			
195	200	205	
Cys Val Met Met Asn Asp Val Leu Glu Thr Leu Pro His Ile Glu Val			
210	215	220	
Lys Ile Glu Gly Lys Ser Glu Ser Pro Gln Glu Glu Met Thr Val Val			
225	230	235	240
Ile Asp Gln Leu Glu Val Cys Asp Ser Leu Ile Pro Ser Thr Ser Ser			
245	250	255	
Met Thr His Val Ser Asp Thr Glu His Lys Glu Ser Glu Thr Ala Val			
260	265	270	
Glu Thr Ser Thr Pro Lys Ile Lys Thr Gly Ser Ser Ser Leu Glu Gly			
275	280	285	
Gln Phe Pro Asn Glu Gly Ile Ala Ile Asp Met Glu Leu Gln Ser Asp			
290	295	300	
Pro Glu Glu Gln Leu Ser Glu Asn Ala Cys Ile Ser Glu Thr Ser Phe			
305	310	315	320
Ser Ser Glu Ser Pro Glu Gly Ala Cys Thr Ser Leu Pro Ser Pro Gly			
325	330	335	
Gly Glu Thr Gln Ser Thr Ser Glu Glu Ser Cys Thr Pro Ala Ser Leu			
340	345	350	
Glu Thr Thr Phe Cys Ser Glu Val Ser Ser Thr Glu Asn Thr Asp Lys			
355	360	365	
Tyr Asn Gln Arg Asn Ser Thr Asp Glu Asn Phe His Ala Ser Leu Met			
370	375	380	
Ser Glu Ile Ser Pro Ile Ser Thr Ser Pro Glu Ile Ser Glu Ala Ser			
385	390	395	400
Leu Met Ser Asn Leu Pro Leu Thr Ser Glu Ala Ser Pro Val Ser Asn			
405	410	415	
Leu Pro Leu Thr Ser Glu Thr Ser Pro Met Ser Asp Leu Pro Leu Thr			

420	425	430
Ser Lys Thr Ser Ser Val Ser Ser Met Leu Leu Thr Ser Glu Thr Thr		
435	440	445
Phe Val Ser Ser Leu Pro Leu Pro Ser Glu Thr Ser Pro Ile Ser Asn		
450	455	460
Ser Ser Ile Asn Glu Arg Met Ala His Gln Gln Arg Lys Ser Pro Ser		
465	470	475
Val Ser Glu Glu Pro Leu Ser Pro Gln Lys Asp Glu Ser Ser Ala Thr		
485	490	495
Ala Lys Pro Leu Gly Glu Asn Leu Thr Ser Gln Gln Lys Asn Leu Ser		
500	505	510
Asn Thr Pro Glu Pro Ile Ile Met Ser Ser Ser Ser Ile Ala Pro Glu		
515	520	525
Ala Phe Pro Ser Glu Asp Leu His Asn Lys Thr Leu Ser Gln Gln Thr		
530	535	540
Cys Lys Ser His Val Asp Thr Glu Lys Pro Tyr Pro Ala Ser Ile Pro		
545	550	555
Glu Leu Ala Ser Thr Glu Met Ile Lys Val Lys Asn His Ser Val Leu		
565	570	575
Gln Arg Thr Glu Lys Lys Val Leu Pro Ser Pro Leu Glu Leu Ser Val		
580	585	590
Phe Ser Glu Gly Thr Asp Asn Lys Gly Asn Glu Leu Pro Ser Ala Lys		
595	600	605
Leu Gln Asp Lys Gln Tyr Ile Ser Ser Val Asp Lys Ala Pro Phe Ser		
610	615	620
Glu Gly Ser Arg Asn Lys Thr His Lys Gln Gly Ser Thr Gln Ser Arg		
625	630	635
Leu Glu Thr Ser His Thr Ser Lys Ser Ser Glu Pro Ser Lys Ser Pro		
645	650	655
Asp Gly Ile Arg Asn Glu Ser Arg Asp Ser Glu Ile Ser Lys Arg Lys		
660	665	670
Thr Ala Glu Gln His Ser Phe Gly Ile Cys Lys Glu Lys Arg Ala Arg		
675	680	685
Ile Glu Asp Asp Gln Ser Thr Arg Asn Ile Ser Ser Ser Ser Pro Pro		
690	695	700
Glu Lys Glu Gln Pro Pro Arg Glu Glu Pro Arg Val Pro Pro Leu Lys		

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705          710          715          720
Ile Gln Leu Ser Lys Ile Gly Pro Pro Phe Ile Ile Lys Ser Gln Pro
          725          730          735
Val Ser Lys Pro Glu Ser Arg Ala Ser Thr Ser Thr Ser Val Ser Gly
          740          745          750
Gly Arg Asn Thr Gly Ala Arg Thr Leu Ala Asp Ile Lys Ala Arg Ala
          755          760          765
Gln Gln Ala Arg Ala Gln Arg Glu Ala Ala Ala Ala Ala Val Ala
          770          775          780
Ala Ala Ala Ser Ile Val Ser Gly Ala Met Gly Ser Pro Gly Glu Gly
785          790          795          800
Gly Lys Thr Arg Thr Leu Ala His Ile Lys Glu Gln Thr Lys Ala Lys
          805          810          815
Leu Phe Ala Lys His Gln Ala Arg Ala His Leu Phe Gln Thr Ser Lys
          820          825          830
Glu Thr Arg Leu Pro Pro Pro Leu Ser Ser Lys Glu Gly Pro Pro Asn
          835          840          845
Leu Glu Val Ser Ser Thr Pro Glu Thr Lys Met Glu Gly Ser Thr Gly
          850          855          860
Val Ile Ile Val Asn Pro Asn Cys Arg Ser Pro Ser Asn Lys Ser Ala
865          870          875          880
His Leu Arg Glu Thr Thr Thr Val Leu Gln Gln Ser Leu Asn Pro Ser
          885          890          895
Lys Leu Pro Glu Thr Ala Thr Asp Leu Ser Val His Ser Ser Asp Glu
          900          905          910
Asn Ile Pro Val Ser His Leu Ser Glu Lys Ile Val Ser Ser Thr Ser
          915          920          925
Ser Glu Asn Ser Ser Val Pro Met Leu Phe Asn Lys Asn Ser Val Pro
          930          935          940

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<210> 4910

<211> 1161

<212> PRT

<213> Homo sapiens

<400> 533

Met Cys Ser Thr Pro Gly Met Pro Ala Pro Gly Ala Ser Leu Ala Leu
 1 5 10 15
 Arg Val Ser Phe Val Asp Val His Pro Asp Val Ile Pro Val Gln Leu
 20 25 30
 Trp Gly Leu Val Gly Glu Arg Arg Gly Glu Tyr Leu Arg Leu Ser Arg
 35 40 45
 Glu Ile Gln Glu Ala Ala Ala Thr Arg Gly Gln Trp Ala Leu Gly Ser
 50 55 60
 Ala Ser Ala Ser Pro Gly Glu Leu Cys Leu Val Gln Val Gly Leu Leu
 65 70 75 80
 Trp His Arg Cys Arg Val Val Ser Arg Gln Ala Gln Glu Ser Arg Val
 85 90 95
 Phe Leu Leu Asp Glu Gly Arg Thr Ile Thr Ala Gly Ala Gly Ser Leu
 100 105 110
 Ala Pro Gly Arg Arg Glu Phe Phe Asn Leu Pro Ser Glu Val Leu Gly
 115 120 125
 Cys Val Leu Ala Gly Leu Val Pro Ala Gly Cys Gly Ala Gly Ser Gly
 130 135 140
 Glu Pro Pro Gln His Trp Pro Ala Asp Ala Val Asp Phe Leu Ser Asn
 145 150 155 160
 Leu Gln Gly Lys Glu Val His Gly Cys Val Leu Asp Val Leu Leu Leu
 165 170 175
 His Arg Leu Val Leu Leu Glu Val Pro Asp Val Phe Gln Gln Met Arg
 180 185 190
 Glu Leu Gly Leu Ala Arg Arg Val Pro Asp Ser Leu Phe Arg Ser Leu
 195 200 205
 Leu Glu Arg Tyr Leu Thr Ala Ala Thr Ala Ser Val Gly Ser Gly Val
 210 215 220
 Pro Val Leu Ser Arg Val Pro Leu Lys Gln Lys Gln Pro Gly Leu Asp
 225 230 235 240
 Tyr Phe Tyr Pro Gln Leu Gln Leu Gly Val Thr Glu Ala Val Val Ile
 245 250 255
 Thr Gln Val Cys His Pro His Arg Ile His Cys Gln Leu Arg Ser Val
 260 265 270
 Ser Gln Glu Ile His Arg Leu Ser Glu Ser Met Ala Gln Val Tyr Arg

275	280	285
Gly Ser Thr Gly Thr Gly Asp Glu Asn Ser Thr Ser Ala Thr Trp Glu		
290	295	300
Glu Arg Glu Glu Ser Pro Asp Lys Pro Gly Ser Pro Cys Ala Ser Cys		
305	310	315
Gly Leu Asp Gly His Trp Tyr Arg Ala Leu Leu Leu Glu Thr Phe Arg		
325	330	335
Pro Gln Arg Cys Ala Gln Val Leu His Val Asp Tyr Gly Arg Lys Glu		
340	345	350
Leu Val Ser Cys Ser Ser Leu Arg Tyr Leu Leu Pro Glu Tyr Phe Arg		
355	360	365
Met Pro Val Val Thr Tyr Pro Cys Ala Leu Tyr Gly Leu Trp Asp Gly		
370	375	380
Gly Arg Gly Trp Ser Arg Ser Gln Val Gly Asp Leu Lys Thr Leu Ile		
385	390	395
Leu Gly Lys Ala Val Asn Ala Lys Ile Glu Phe Tyr Cys Ser Phe Glu		
405	410	415
His Val Tyr Tyr Val Ser Leu Tyr Gly Glu Asp Gly Ile Asn Leu Asn		
420	425	430
Arg Val Phe Gly Val Gln Ser Cys Cys Leu Ala Asp Arg Val Leu Gln		
435	440	445
Ser Gln Ala Thr Glu Glu Glu Glu Pro Glu Thr Ser Gln Ser Gln Ser		
450	455	460
Pro Ala Glu Glu Val Asp Glu Glu Ile Ser Leu Pro Ala Leu Arg Ser		
465	470	475
Ile Arg Leu Lys Met Asn Ala Phe Tyr Asp Ala Gln Val Glu Phe Val		
485	490	495
Lys Asn Pro Ser Glu Phe Trp Ile Arg Leu Arg Lys His Asn Val Thr		
500	505	510
Phe Ser Lys Leu Met Arg Arg Met Cys Gly Phe Tyr Ser Ser Ala Ser		
515	520	525
Lys Leu Asp Gly Val Val Leu Lys Pro Glu Pro Asp Asp Leu Cys Cys		
530	535	540
Val Lys Trp Lys Glu Asn Gly Tyr Tyr Arg Ala Ile Val Thr Lys Leu		
545	550	555
Asp Asp Lys Ser Val Asp Val Phe Leu Val Asp Arg Gly Asn Ser Glu		

	565		570		575
Asn Val Asp Trp Tyr Asp Val Arg Met Leu Leu Pro Gln Phe Arg Gln					
	580		585		590
Leu Pro Ile Leu Ala Val Lys Cys Thr Leu Ala Asp Ile Trp Pro Leu					
	595		600		605
Gly Lys Thr Trp Ser Gln Glu Ala Val Ser Phe Phe Lys Lys Thr Val					
	610		615		620
Leu His Lys Glu Leu Val Ile His Ile Leu Asp Lys Gln Asp His Gln					
625		630		635	640
Tyr Val Ile Glu Ile Leu Asp Glu Ser Arg Thr Gly Glu Glu Asn Ile					
	645		650		655
Ser Lys Val Ile Ala Gln Ala Gly Tyr Ala Lys Tyr Gln Glu Phe Glu					
	660		665		670
Thr Lys Glu Asn Ile Leu Val Asn Ala His Ser Pro Gly His Val Ser					
	675		680		685
Asn His Phe Thr Thr Glu Ser Asn Lys Ile Pro Phe Ala Lys Thr Gly					
	690		695		700
Glu Gly Glu Gln Lys Ala Lys Arg Glu Asn Lys Thr Thr Ser Val Ser					
705		710		715	720
Lys Ala Leu Ser Asp Thr Thr Val Val Thr Asn Gly Ser Thr Glu Leu					
	725		730		735
Val Val Gln Glu Lys Val Lys Arg Ala Ser Val Tyr Phe Pro Leu Met					
	740		745		750
Gln Asn Cys Leu Glu Ile Lys Pro Gly Ser Ser Ser Lys Gly Glu Leu					
	755		760		765
Glu Val Gly Ser Thr Val Glu Val Arg Val Ser Tyr Val Glu Asn Pro					
	770		775		780
Gly Tyr Phe Trp Cys Gln Leu Thr Arg Asn Ile Gln Gly Leu Lys Thr					
785		790		795	800
Leu Met Ser Asp Ile Gln Tyr Tyr Cys Lys Asn Thr Ala Ala Pro His					
	805		810		815
Gln Arg Asn Thr Leu Ala Cys Leu Ala Lys Arg Thr Val Asn Arg Gln					
	820		825		830
Trp Ser Arg Ala Leu Ile Ser Gly Ile Gln Ser Val Glu His Val Asn					
	835		840		845
Val Thr Phe Val Asp Tyr Gly Asp Arg Glu Met Val Ser Val Lys Asn					

850	855	860	
Ile Tyr Ser Ile Ser Glu Glu Phe Leu Lys Val Lys Ala Gln Ala Phe			
865	870	875	880
Arg Cys Ser Leu Tyr Asn Leu Ile Gln Pro Val Gly Gln Asn Pro Phe			
	885	890	895
Val Trp Asp Val Lys Ala Ile Gln Ala Phe Asn Glu Phe Ile Asp Asn			
	900	905	910
Ala Trp Gln Lys Asn Leu Glu Leu Lys Cys Thr Ile Phe Ala Leu Ala			
	915	920	925
Ser Ile Asn Glu Glu Leu Phe Asn Ile Val Asp Leu Leu Thr Pro Phe			
930	935	940	
Gln Ser Ala Cys His Phe Leu Val Glu Lys Arg Leu Ala Arg Pro Val			
945	950	955	960
Lys Leu Gln Lys Pro Leu Glu Ser Ser Val Gln Leu His Ser Tyr Phe			
	965	970	975
Tyr Ser Thr His Asp Met Lys Ile Gly Ser Glu Glu Leu Val Tyr Ile			
	980	985	990
Thr His Ile Asp Asp Pro Trp Thr Phe Tyr Cys Gln Leu Ala Arg Asn			
	995	1000	1005
Ala Asn Ile Leu Glu Gln Leu Ser Cys Ser Ile Thr Gln Leu Ser Lys			
1010	1015	1020	
Val Leu Leu Asn Leu Lys Thr Ser Pro Leu Asn Pro Gly Thr Leu Cys			
1025	1030	1035	1040
Leu Ala Lys Tyr Thr Asp Gly Asn Trp Tyr Arg Gly Ile Val Ile Glu			
	1045	1050	1055
Lys Glu Pro Lys Lys Val Phe Phe Val Asp Phe Gly Asn Ile Tyr Val			
	1060	1065	1070
Val Thr Ser Asp Asp Leu Leu Pro Ile Pro Ser Asp Ala Tyr Asp Val			
	1075	1080	1085
Leu Leu Leu Pro Met Gln Ala Val Arg Cys Ser Leu Ser Asp Ile Pro			
1090	1095	1100	
Asp His Ile Pro Glu Glu Val Val Val Trp Phe Gln Glu Thr Ile Leu			
1105	1110	1115	1120
Asp Lys Ser Leu Lys Ala Leu Val Val Ala Lys Asp Pro Asp Gly Thr			
	1125	1130	1135
Leu Ile Ile Glu Leu Tyr Gly Asp Asn Ile Gln Ile Ser Ala Ser Ile			

1140 1145 1150
 Asn Lys Lys Leu Gly Leu Leu Ser Tyr
 1155 1160

<210> 4911
 <211> 762
 <212> PRT
 <213> Homo sapiens

<400> 534

Met Gly Asp Leu Lys Ser Gly Phe Glu Glu Val Asp Gly Val Arg Leu
 1 5 10 15
 Gly Tyr Leu Ile Ile Lys Gly Lys Gln Met Phe Ala Leu Ser Gln Val
 20 25 30
 Phe Thr Asp Leu Leu Lys Asn Ile Pro Arg Thr Thr Val His Lys Arg
 35 40 45
 Met Asp His Leu Lys Val Lys Lys His His Cys Asp Leu Glu Glu Leu
 50 55 60
 Arg Lys Leu Lys Ala Ile Asn Ser Ile Ala Phe His Ala Ala Lys Cys
 65 70 75 80
 Thr Leu Ile Ser Arg Glu Asp Val Glu Ala Leu Tyr Thr Ser Cys Lys
 85 90 95
 Thr Glu Arg Val Leu Lys Thr Lys Arg Arg Arg Val Gly Arg Ala Leu
 100 105 110
 Ala Thr Lys Ala Pro Pro Pro Glu Arg Ala Ala Ala Ser Pro Arg
 115 120 125
 Pro Gly Phe Trp Lys Asp Lys His Gln Leu Trp Arg Gly Leu Ser Gly
 130 135 140
 Ala Ala Arg Pro Leu Pro Ile Ser Ala Gln Ser Gln Arg Pro Gly Ala
 145 150 155 160
 Ala Ala Ala Arg Pro Ala Ala His Leu Pro Gln Ile Phe Ser Lys Tyr
 165 170 175
 Pro Gly Ser His Tyr Pro Glu Ile Val Arg Ser Pro Cys Lys Pro Pro
 180 185 190

Leu Asn Tyr Glu Thr Ala Pro Leu Gln Gly Asn Tyr Val Ala Phe Pro
 195 200 205
 Ser Asp Pro Ala Tyr Phe Arg Ser Leu Leu Cys Ser Lys His Pro Ala
 210 215 220
 Ala Ala Ala Ala Gly Ala Thr Cys Leu Glu Arg Phe His Leu Val Asn
 225 230 235 240
 Gly Phe Cys Pro Pro Pro His His His His His His His His His
 245 250 255
 His His His His His Arg Ala Gln Pro Pro Gln Gln Ser His His Pro
 260 265 270
 Pro His His His Arg Pro Gln Pro His Leu Gly Ser Phe Pro Glu Ser
 275 280 285
 Cys Ser Ser Asp Ser Glu Ser Ser Ser Tyr Ser Asp His Ala Ala Asn
 290 295 300
 Asp Ser Asp Phe Gly Ser Ser Leu Ser Ser Ser Ser Asn Ser Val Ser
 305 310 315 320
 Ser Glu Glu Glu Glu Glu Glu Gly Glu Glu Glu Glu Glu Glu Glu
 325 330 335
 Glu Glu Glu Glu Gly Gly Ser Gly Ala Ser Asp Ser Ser Glu Val Ser
 340 345 350
 Ser Glu Glu Glu Asp Ser Ser Thr Glu Ser Asp Ser Ser Ser Gly Ser
 355 360 365
 Ser Gln Val Ser Val Gln Ser Ile Arg Phe Arg Arg Thr Ser Phe Cys
 370 375 380
 Lys Pro Pro Ser Val Gln Ala Gln Ala Asn Phe Leu Tyr His Leu Ala
 385 390 395 400
 Ser Ala Ala Ala Ala Thr Lys Pro Ala Ala Phe Glu Asp Ala Gly Arg
 405 410 415
 Leu Pro Asp Leu Lys Ser Ser Val Lys Ala Glu Ser Pro Ala Glu Trp
 420 425 430
 Asn Leu Gln Ser Trp Ala Pro Lys Ala Ser Pro Val Tyr Cys Pro Ala
 435 440 445
 Ser Leu Gly Ser Cys Phe Ala Glu Ile Arg Asn Asp Arg Val Ser Glu
 450 455 460
 Ile Thr Phe Pro His Ser Glu Ile Ser Asn Ala Val Lys Arg Thr Asp
 465 470 475 480

Leu Thr Ile Asn Cys Leu Ala Glu Gly Ala Ser Ser Pro Ser Pro Lys
 485 490 495
 Thr Asn Asn Ala Phe Pro Gln Gln Arg Ile Leu Arg Glu Ala Arg Lys
 500 505 510
 Cys Leu Gln Thr Thr Pro Thr Thr His Cys Ala Asp Asn Asn Thr Ile
 515 520 525
 Ala Ala Arg Phe Leu Asn Asn Asp Ser Ser Gly Ala Glu Ala Asn Ser
 530 535 540
 Glu Lys Tyr Ser Lys Ile Leu His Cys Pro Glu Phe Ala Thr Asp Leu
 545 550 555 560
 Pro Ser Ser Gln Thr Asp Pro Glu Val Asn Ala Ala Gly Ala Ala Ala
 565 570 575
 Thr Lys Ala Glu Asn Pro Cys Thr Asp Thr Gly Asp Lys Thr Leu Pro
 580 585 590
 Phe Leu His Asn Ile Lys Ile Lys Val Glu Asp Ser Ser Ala Asn Glu
 595 600 605
 Glu Tyr Glu Pro His Leu Phe Thr Asn Lys Leu Lys Cys Glu Cys Asn
 610 615 620
 Asp Thr Lys Gly Glu Phe Tyr Ser Val Thr Glu Ser Lys Glu Glu Asp
 625 630 635 640
 Ala Leu Leu Thr Thr Ala Lys Glu Gly Phe Ala Cys Pro Glu Lys Glu
 645 650 655
 Thr Pro Ser Leu Asn Pro Leu Ala Gln Ser Gln Gly Leu Ser Cys Thr
 660 665 670
 Leu Gly Ser Pro Lys Pro Glu Asp Gly Glu Tyr Lys Phe Gly Ala Arg
 675 680 685
 Val Arg Lys Asn Tyr Arg Thr Leu Val Leu Gly Lys Arg Pro Val Leu
 690 695 700
 Gln Thr Pro Pro Val Lys Pro Asn Leu Lys Ser Ala Arg Ser Pro Arg
 705 710 715 720
 Pro Thr Gly Lys Thr Glu Thr Asn Glu Gly Thr Leu Asp Asp Phe Thr
 725 730 735
 Val Ile Asn Arg Arg Lys Lys Val Ala Ser Asn Val Ala Ser Ala Val
 740 745 750
 Lys Arg Pro Phe His Phe Met Ala Asn Lys
 755 760

<210> 4912

<211> 619

<212> PRT

<213> Homo sapiens

<400> 535

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Met Glu Gly Asp Ala Glu Thr Asp Val Leu Glu Cys Ala Asn Gln Arg
 1             5             10             15
Leu Val Ile Ser Glu Thr Asp Gly Glu Ile Leu Thr Pro Gly Trp Asp
          20             25             30
Thr Gln Asp Arg Met Gly Val Glu Ser Arg Thr Asn Ile Gln Glu Leu
      35             40             45
Gly Asn Arg Asn Gln Arg Glu Ala Gly Gly Glu Asn Leu Pro Glu Thr
      50             55             60
Gln Ala His Met Gly Glu Asn Gln Glu Gln Leu Arg Cys Lys Ile Asp
      65             70             75             80
Ala Glu Thr Gln Thr Pro Glu Trp Glu Asn Gln Asp Lys Asn Gly Ser
          85             90             95
Glu Asp Ala Val Glu Thr Gln Thr Phe Glu Lys Lys Asp Lys Lys Glu
          100            105            110
Ala Gly Glu Glu Asp Gly Glu Glu Ile Gln Ala Gln Gly Leu Gly Lys
          115            120            125
Gln Gly Gln Thr Gly Asp Glu Asn Gly Glu Glu Thr Gln Thr Pro Gln
          130            135            140
Trp Glu Lys Gln Asp Gln Met Lys Gly Asp Ala Asp Val Glu Ile Gln
          145            150            155            160
Met Glu Glu Gly Arg Asn Lys Asp Gln Val Gly Gly Gln Asp Ala Ala
          165            170            175
Gln Thr Gln Ser Cys Gly Arg Glu Asn Val Gly Glu Val Lys Lys Glu
          180            185            190
Asn Ser Val Glu Thr Gln Ala Leu Asp Trp Gly Lys Gln Glu Cys Val
          195            200            205
Gly Asn Gly Asn Val Thr Glu Ile Gln Thr Pro Arg Trp Glu Lys His
          210            215            220

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Asp Gln Gly Gly Ser Lys Lys Ala Lys Lys Thr Gln Ala Ser Gly Gly
 225 230 235 240
 Glu Asn Gln Lys Gln Leu Ser His Glu Ile Gln Val Gly Trp Gly Asn
 245 250 255
 Lys Gly Leu Arg Arg Asp Glu Asp Ala Lys Glu Thr Gln Ile Ala Thr
 260 265 270
 Lys Lys Lys Leu Arg Glu Ile Arg Glu Lys Asp Trp Val Val Ile Gln
 275 280 285
 Ala Leu Trp Trp Gly Asn Arg Arg Gln Val Ala Ser Glu Ile Tyr Arg
 290 295 300
 Glu Phe Glu Ile Leu Cys Trp Glu Asn Gln Asn Trp Ile Gly Gly Glu
 305 310 315 320
 His Arg Ala Glu Ile Gln Ala Ser Glu Lys Arg Asp Gln Arg Lys Asp
 325 330 335
 Gly Cys Glu Asp Gly Thr Asn Ile Leu Ala Pro Glu Ala Glu Ile Gln
 340 345 350
 Glu Gln Leu Lys Gly Glu Thr Asp Val Glu Thr Gln Ser Asn Glu Pro
 355 360 365
 Leu Arg Glu Glu Asp Gly Thr Asp Ile Gln Ser Leu Gly Arg Arg Glu
 370 375 380
 Val Lys Gly Glu Asp Asp Lys Asp Thr Gln Glu Leu Gly Arg Lys Asn
 385 390 395 400
 Gln Gly Gln Leu Gly Asn Glu Phe Ser Gly Lys Ile His Ile Pro Lys
 405 410 415
 Gly Lys Asn Gln Glu His Ile Arg Gly Glu Asp Gly Ala His Thr Gln
 420 425 430
 Ile Ser Glu Ser Gly Asn Trp Gly Lys Leu Thr Ser Gln Ile Asp Gly
 435 440 445
 Glu Met His Ser Ala Glu Trp Lys Lys Asp Gln Gln Ile Gly Gly Glu
 450 455 460
 Asn Gly Ala Glu Ile Gln Ile Gln Gly Lys Arg Asn Leu Arg Glu Val
 465 470 475 480
 Gly Gly Glu Asp Gly Val Lys Thr Trp Ala Pro Gly Lys Glu Thr Gln
 485 490 495
 Ser Gln Phe Arg Ser Asp Leu Gly Arg Lys Ile Leu Leu Ser Glu Trp
 500 505 510

Lys	Ser	Gln	Lys	Gln	Met	Gly	Ser	Glu	Asn	Gly	Thr	Glu	Ile	Gln	Ala	
515				520				525								
Pro	Val	Glu	Arg	Asn	Gln	Arg	Glu	Pro	Gly	Gly	Glu	Asp	Gly	Val	Lys	
530				535				540								
Thr	Gln	Arg	Pro	Lys	Arg	Glu	Asn	Glu	Asp	Gln	Leu	Asp	Ser	Glu	Ile	
545				550				555				560				
Gly	Gly	Ser	His	Ser	Pro	Gly	Arg	Arg	Asn	Trp	Glu	Leu	Ile	Gly	Lys	
565				570				575								
Asp	Val	Ala	Glu	Asn	Gln	Ala	Ser	Glu	Lys	Arg	Asn	Gln	Arg	Glu	Val	
580				585				590								
Gly	Asn	Glu	Asp	Gly	Arg	Met	Ile	Trp	Arg	Leu	Arg	Gly	Lys	Asn	Trp	
595				600				605								
Arg	Leu	Arg	Ala	Lys	Lys	Gln	Thr	Val	Lys	Lys						
610				615												

<210> 4913

<211> 164

<212> PRT

<213> Homo sapiens

<400> 536

Met	Asn	Val	Leu	Val	Trp	Glu	Asp	Cys	Ile	Ala	Glu	Gln	Ala	Glu	Val
1					5				10					15	
Leu	His	Asn	Asp	Ser	Tyr	Gly	Val	Ile	Ile	Asp	Cys	Ser	Pro	Lys	Gly
				20				25					30		
Met	Phe	Ser	Leu	Asn	Cys	Thr	Ser	Gln	Ser	Ala	Cys	His	Gly	His	Thr
			35				40					45			
Met	Phe	Ser	Trp	Ser	Glu	Gln	Asn	Gly	Gln	Met	Val	Glu	Met	Ile	Arg
		50				55				60					
Ser	Met	Ala	Arg	Val	Pro	Ile	Ile	Trp	Lys	His	Gly	Gly	Ile	Val	Ala
65					70				75					80	
Pro	Gln	Pro	Gln	Met	Ile	Trp	Pro	Ala	Val	Gly	Ala	Lys	His	Lys	Asp
				85					90					95	
Leu	Trp	Lys	Leu	Leu	Met	Ala	Leu	Asn	Lys	Ile	Lys	Ile	Trp	Glu	Arg
			100					105					110		

Ile	Lys	Lys	His	Leu	Glu	Gly	His	Ser	Arg	Asn	Leu	Asp	Ile	Ala	Lys
115				120				125							
Leu	Lys	Glu	Gln	Ile	Phe	Lys	Ala	Ser	Gln	Ala	His	Leu	Thr	Leu	Met
130				135				140							
Pro	Gly	Thr	Gly	Val	Leu	Glu	Gly	Ala	Ala	Asp	Gly	Leu	Ala	Ala	Ile
145				150				155				160			
Asn	Pro	Leu	Lys												

<210> 4914

<211> 236

<212> PRT

<213> Homo sapiens

<400> 537

Met	Ser	Ser	Thr	Glu	Ser	Ala	Gly	Arg	Thr	Ala	Asp	Lys	Ser	Pro	Arg
1				5					10					15	
Gln	Gln	Val	Asp	Arg	Leu	Leu	Val	Gly	Leu	Arg	Trp	Arg	Arg	Leu	Glu
			20					25					30		
Glu	Pro	Leu	Gly	Phe	Ile	Lys	Val	Leu	Gln	Trp	Leu	Phe	Ala	Ile	Phe
			35					40					45		
Ala	Phe	Gly	Ser	Cys	Gly	Ser	Tyr	Ser	Gly	Glu	Thr	Gly	Ala	Met	Val
	50						55					60			
Arg	Cys	Asn	Asn	Glu	Ala	Lys	Asp	Val	Ser	Ser	Ile	Ile	Val	Ala	Phe
65					70					75					80
Gly	Tyr	Pro	Phe	Arg	Leu	His	Arg	Ile	Gln	Tyr	Glu	Met	Pro	Leu	Cys
				85					90					95	
Asp	Glu	Gly	Ser	Ser	Ser	Lys	Thr	Met	His	Leu	Met	Gly	Asp	Phe	Ser
			100					105					110		
Ala	Pro	Ala	Glu	Phe	Phe	Val	Thr	Leu	Gly	Ile	Phe	Ser	Phe	Phe	Tyr
			115					120					125		
Thr	Met	Ala	Ala	Leu	Val	Ile	Tyr	Leu	Arg	Phe	His	Asn	Leu	Tyr	Thr
	130						135					140			
Glu	Asn	Lys	Arg	Phe	Pro	Leu	Val	Asp	Phe	Cys	Val	Thr	Val	Ser	Phe
145					150					155					160

Thr Phe Phe Trp Leu Val Ala Ala Ala Ala Trp Gly Lys Gly Leu Thr
 165 170 175
 Asp Val Lys Gly Ala Thr Arg Pro Ser Ser Leu Thr Ala Ala Met Ser
 180 185 190
 Val Cys His Gly Glu Glu Ala Val Cys Ser Ala Gly Ala Thr Pro Ser
 195 200 205
 Met Gly Leu Ala Asn Ile Ser Val Val Arg Pro Val Ala Thr Ala Gly
 210 215 220
 Ser Ser Thr Ser Pro Ala Ala Gln Ala Cys Pro Ser
 225 230 235

<210> 4915

<211> 390

<212> PRT

<213> Homo sapiens

<400> 538

Met Cys Ile Cys His Leu Pro Cys Arg Pro Val Lys Pro Asn Ile Ile
 1 5 10 15
 Gly Glu Gln Ile Thr Ser Lys Met Gly Ala His Tyr His Cys Ile Ile
 20 25 30
 Cys Ser Ala Thr Ile Thr Arg Arg Thr Asp Met Leu Gly His Val Arg
 35 40 45
 Arg His Met Asn Lys Gly Glu Thr Lys Ser Ser Tyr Ile Ala Ala Ser
 50 55 60
 Thr Ala Lys Pro Pro Lys Glu Ile Leu Lys Glu Ala Asp Thr Asp Val
 65 70 75 80
 Gln Val Cys Pro Asn Tyr Ser Ile Pro Gln Lys Thr Asp Ser Tyr Phe
 85 90 95
 Asn Pro Lys Met Lys Leu Asn Arg Gln Leu Ile Phe Cys Thr Leu Ala
 100 105 110
 Ala Leu Ala Glu Glu Arg Lys Pro Leu Glu Cys Leu Asp Ala Phe Gly
 115 120 125
 Ala Thr Gly Ile Met Gly Leu Gln Trp Ala Lys His Leu Gly Asn Ala
 130 135 140

Val Lys Val Thr Ile Asn Asp Leu Asn Glu Asn Ser Val Thr Leu Ile
 145 150 155 160
 Gln Glu Ser Cys His Leu Asn Lys Leu Lys Val Val Val Asp Ser Lys
 165 170 175
 Glu Lys Glu Lys Ser Asp Asp Ile Leu Glu Glu Gly Glu Lys Asn Leu
 180 185 190
 Gly Asn Ile Lys Val Thr Lys Met Asp Ala Asn Val Leu Met His Leu
 195 200 205
 Arg Ser Phe Asp Phe Ile His Leu Asp Pro Phe Gly Thr Ser Val Asn
 210 215 220
 Tyr Leu Asp Ser Ala Phe Arg Asn Ile Arg Asn Leu Gly Ile Val Ser
 225 230 235 240
 Val Thr Ser Thr Asp Ile Ser Ser Leu Tyr Ala Lys Ala Gln His Val
 245 250 255
 Ala Arg Arg His Tyr Gly Cys Asn Ile Val Arg Thr Glu Tyr Tyr Lys
 260 265 270
 Glu Leu Ala Ala Arg Ile Val Val Ala Ala Val Ala Arg Ala Ala Ala
 275 280 285
 Arg Cys Asn Lys Gly Ile Glu Val Leu Phe Ala Val Ala Leu Glu His
 290 295 300
 Phe Val Leu Val Val Val Arg Val Leu Arg Gly Pro Thr Ser Ala Asp
 305 310 315 320
 Glu Thr Ala Lys Lys Ile Gln Tyr Leu Ile His Cys Gln Trp Cys Glu
 325 330 335
 Glu Arg Ile Phe Gln Lys Asp Gly Asn Met Val Glu Asp Tyr Ser Ala
 340 345 350
 Asn Phe Val Ile Ser Tyr Thr Gly Phe Pro Phe Val Asn Arg Gln Asp
 355 360 365
 Ile Arg Lys Thr His Ile Asp Ser Cys Leu Val Thr Val Met Glu Ala
 370 375 380
 Cys Leu Glu Arg Gln Gln
 385 390

<210> 4916

<211> 619

<212> PRT

<213> Homo sapiens

<400> 539

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Met Ala Arg Leu Gln Arg Arg Ala Ser Gln Arg Arg Gln Gly Gly Thr
  1             5             10             15
Trp Gly Leu Arg Val Val Gln Glu Pro Gly Gly His Leu Tyr Ile Trp
      20             25             30
Leu Ala Ser Glu Lys Ala His Glu Arg Gln Arg Ala Val His Ser Cys
      35             40             45
Met Ile Leu Leu Lys Phe Leu Asn His Asn Gly Tyr Leu Asp Pro Lys
      50             55             60
Glu Asp Phe Lys Arg Ile Gly Gln Leu Val Gly Ile Leu Gly Met Leu
      65             70             75             80
Cys Gln Asp Pro Asp Arg Ala Thr Gln Arg Cys Ser Leu Glu Gly Ala
      85             90             95
Ser His Leu Tyr Gln Leu Leu Met Cys His Lys Arg Glu Ala Leu Gln
      100            105            110
Ala Glu Ser Gln Ala Pro Lys Glu Leu Ser Gln Ala His Ser Asp Gly
      115            120            125
Ala Pro Leu Trp Asn Ser Arg Asp Gln Lys Ala Thr Pro Leu Gly Pro
      130            135            140
Gln Glu Met Ala Lys Asn His Ile Phe Gln Leu Cys Ser Phe Gln Val
      145            150            155            160
Ile Lys Asp Ile Met Gln Gln Leu Thr Leu Ala Glu Leu Ser Asp Leu
      165            170            175
Ile Trp Thr Ala Ile Asp Gly Leu Gly Ser Thr Ser Pro Phe Arg Val
      180            185            190
Gln Ala Ala Ser Glu Met Leu Leu Thr Ala Val Gln Glu His Gly Ala
      195            200            205
Lys Leu Glu Ile Val Ser Ser Met Ala Gln Ala Ile Arg Leu Arg Leu
      210            215            220
Cys Ser Val His Ile Pro Gln Ala Lys Glu Lys Thr Leu His Ala Ile
      225            230            235            240
Thr Leu Leu Ala Arg Ser His Thr Cys Glu Leu Val Ala Thr Phe Leu
      245            250            255

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Asn Ile Ser Ile Pro Leu Asp Ser His Thr Phe Gln Leu Trp Arg Ala
 260 265 270
 Leu Gly Ala Glu Gln Pro Thr Ser His Leu Val Leu Thr Thr Leu Leu
 275 280 285
 Ala Cys Leu Gln Glu Arg Pro Leu Pro Thr Gly Ala Ser Asp Ser Ser
 290 295 300
 Pro Cys Pro Lys Glu Lys Thr Tyr Leu Arg Leu Leu Ala Ala Met Asn
 305 310 315 320
 Met Leu His Glu Leu Gln Phe Ala Arg Glu Phe Lys Gln Ala Val Gln
 325 330 335
 Glu Gly Tyr Pro Lys Leu Phe Leu Ala Leu Leu Thr Gln Met His Tyr
 340 345 350
 Val Leu Glu Leu Asn Leu Pro Ser Glu Pro Gln Pro Lys Gln Gln Ala
 355 360 365
 Gln Glu Ala Ala Val Pro Ser Pro Gln Ser Cys Ser Thr Ser Leu Glu
 370 375 380
 Ala Leu Lys Ser Leu Leu Ser Thr Thr Gly His Trp His Asp Phe Ala
 385 390 395 400
 His Leu Glu Leu Gln Gly Ser Trp Glu Leu Phe Thr Thr Ile His Thr
 405 410 415
 Tyr Pro Lys Gly Val Gly Leu Leu Ala Arg Ala Met Val Gln Asn His
 420 425 430
 Cys Arg Gln Ile Pro Ala Val Leu Arg Gln Leu Leu Pro Ser Leu Gln
 435 440 445
 Ser Pro Gln Glu Arg Glu Arg Lys Val Ala Ile Leu Ile Leu Thr Lys
 450 455 460
 Phe Leu Tyr Ser Pro Val Leu Leu Glu Val Leu Pro Lys Gln Ala Ala
 465 470 475 480
 Leu Thr Val Leu Ala Gln Gly Leu His Asp Pro Ser Pro Glu Val Arg
 485 490 495
 Val Leu Ser Leu Gln Gly Leu Ser Asn Ile Leu Phe His Pro Asp Lys
 500 505 510
 Glu Arg Asp Gly Ile Arg Ala Ala Ala Met Ala Leu Phe Gly Asp Leu
 515 520 525
 Val Ala Ala Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val
 530 535 540

His Gln Ser Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro
 545 550 555 560
 Ala Val Ala Thr Gln Ala Lys Phe Thr Phe Tyr Arg Cys Ala Val Leu
 565 570 575
 Leu Arg Trp Arg Leu Leu His Thr Leu Phe Cys Thr Leu Ala Trp Glu
 580 585 590
 Arg Gly Leu Ser Ala Arg His Phe Leu Trp Thr Cys Leu Ala Thr Pro
 595 600 605
 Ser Ala Thr Thr Pro Arg Pro Cys Ser Arg Cys
 610 615

<210> 4917

<211> 1103

<212> PRT

<213> Homo sapiens

<400> 540

Met His Phe Leu Ala Ala Gln Asn Gln Phe Leu His Ser Pro Phe Leu
 1 5 10 15
 Glu Arg Pro Met Asp Met Pro Tyr Met Ile Phe Asp Pro Asn Asn Pro
 20 25 30
 Leu Met Thr Gly Gln Leu Leu Gly Ser Ser Leu Thr Gln Met Pro Pro
 35 40 45
 Gln Ala Ser Ser Ser His Thr Thr Ala Pro Thr Thr Val Ala Ala Ser
 50 55 60
 Leu Lys Arg Lys Leu Asp Asp Lys Glu Asp Asn Asn Cys Ser Glu Lys
 65 70 75 80
 Glu Gly Gly Asn Ser Gly Glu Asp Gln His Arg Asp Lys Arg Leu Arg
 85 90 95
 Thr Thr Ile Thr Pro Glu Gln Leu Glu Ile Leu Tyr Glu Lys Tyr Leu
 100 105 110

 Leu Asp Ser Asn Pro Thr Arg Lys Met Leu Asp His Ile Ala Arg Glu
 115 120 125
 Val Gly Leu Lys Lys Arg Val Val Gln Val Trp Phe Gln Asn Thr Arg

130	135	140	
Ala Arg Glu Arg Lys Gly Gln Phe Arg Ala Val Gly Pro Ala Gln Ser			
145	150	155	160
His Lys Arg Cys Pro Phe Cys Arg Ala Leu Phe Lys Ala Lys Ser Ala			
	165	170	175
Leu Glu Ser His Ile Arg Ser Arg His Trp Asn Glu Gly Lys Gln Ala			
	180	185	190
Gly Tyr Ser Leu Pro Pro Ser Pro Leu Ile Ser Thr Glu Asp Gly Gly			
	195	200	205
Glu Ser Pro Gln Lys Tyr Ile Tyr Phe Asp Tyr Pro Ser Leu Pro Leu			
	210	215	220
Thr Lys Ile Asp Leu Ser Ser Glu Asn Glu Leu Ala Ser Thr Val Ser			
225	230	235	240
Thr Pro Val Ser Lys Thr Ala Glu Leu Ser Pro Lys Asn Leu Leu Ser			
	245	250	255
Pro Ser Ser Phe Lys Ala Glu Cys Ser Glu Asp Val Glu Asn Leu Asn			
	260	265	270
Ala Pro Pro Ala Glu Ala Gly Tyr Asp Gln Asn Lys Thr Asp Phe Asp			
	275	280	285
Glu Thr Ser Ser Ile Asn Thr Ala Ile Ser Asp Ala Thr Thr Gly Asp			
	290	295	300
Glu Gly Asn Thr Glu Met Glu Ser Thr Thr Gly Ser Ser Gly Asp Val			
305	310	315	320
Lys Pro Ala Leu Ser Pro Lys Glu Pro Lys Thr Leu Asp Thr Leu Pro			
	325	330	335
Lys Pro Ala Thr Thr Pro Thr Thr Glu Val Cys Asp Asp Lys Phe Leu			
	340	345	350
Phe Ser Leu Thr Ser Pro Ser Ile His Phe Asn Asp Lys Asp Gly Asp			
	355	360	365
His Asp Gln Ser Phe Tyr Ile Thr Asp Asp Pro Asp Asp Asn Ala Asp			
	370	375	380
Arg Ser Glu Thr Ser Ser Ile Ala Asp Pro Ser Ser Pro Asn Pro Phe			
385	390	395	400
Gly Ser Ser Asn Pro Phe Lys Ser Lys Ser Asn Asp Arg Pro Gly His			
	405	410	415
Lys Arg Phe Arg Thr Gln Met Ser Asn Leu Gln Leu Lys Val Leu Lys			

420	425	430	
Ala Cys Phe Ser Asp Tyr Arg Thr Pro Thr Met Gln Glu Cys Glu Met			
435	440	445	
Leu Gly Asn Glu Ile Gly Leu Pro Lys Arg Val Val Gln Val Trp Phe			
450	455	460	
Gln Asn Ala Arg Ala Lys Glu Lys Lys Phe Lys Ile Asn Ile Gly Lys			
465	470	475	480
Pro Phe Met Ile Asn Gln Gly Gly Thr Glu Gly Thr Lys Pro Glu Cys			
485	490	495	
Thr Leu Cys Gly Val Lys Tyr Ser Ala Arg Leu Ser Ile Arg Asp His			
500	505	510	
Ile Phe Ser Lys Gln His Ile Ser Lys Val Arg Glu Thr Val Gly Ser			
515	520	525	
Gln Leu Asp Arg Glu Lys Asp Tyr Leu Ala Pro Thr Thr Val Arg Gln			
530	535	540	
Leu Met Ala Gln Gln Glu Leu Asp Arg Ile Lys Lys Ala Ser Asp Val			
545	550	555	560
Leu Gly Leu Thr Val Gln Gln Pro Gly Met Met Asp Ser Ser Ser Leu			
565	570	575	
His Gly Ile Ser Leu Pro Thr Ala Tyr Pro Gly Leu Pro Gly Leu Pro			
580	585	590	
Pro Val Leu Leu Pro Gly Met Asn Gly Pro Ser Ser Leu Pro Gly Phe			
595	600	605	
Pro Gln Asn Ser Asn Thr Leu Thr Pro Pro Gly Ala Gly Met Leu Gly			
610	615	620	
Phe Pro Thr Ser Ala Thr Ser Ser Pro Ala Leu Ser Leu Ser Ser Ala			
625	630	635	640
Pro Thr Lys Pro Leu Leu Gln Thr Pro Pro Pro Pro Pro Pro Pro			
645	650	655	
Pro Pro Pro Pro Ser Ser Ser Leu Ser Gly Gln Gln Thr Glu Gln Gln			
660	665	670	
Asn Lys Glu Ser Glu Lys Lys Gln Thr Lys Pro Asn Lys Val Lys Lys			
675	680	685	
Ile Lys Glu Glu Glu Leu Glu Ala Thr Lys Pro Glu Lys His Pro Lys			
690	695	700	
Lys Glu Glu Lys Ile Ser Ser Ala Leu Ser Val Leu Gly Lys Val Val			

705	710	715	720
Gly Glu Thr His Val Asp Pro Ile Gln Leu Gln Ala Leu Gln Asn Ala			
725	730	735	
Ile Ala Gly Asp Pro Ala Ser Phe Ile Gly Gly Gln Phe Leu Pro Tyr			
740	745	750	
Phe Ile Pro Gly Phe Ala Ser Tyr Phe Thr Pro Gln Leu Pro Gly Thr			
755	760	765	
Val Gln Gly Gly Tyr Phe Pro Pro Val Cys Gly Met Glu Ser Leu Phe			
770	775	780	
Pro Tyr Gly Pro Thr Met Pro Gln Thr Leu Ala Gly Leu Ser Pro Gly			
785	790	795	800
Ala Leu Leu Gln Gln Tyr Gln Gln Tyr Gln Gln Asn Leu Gln Glu Ser			
805	810	815	
Leu Gln Lys Gln Gln Lys Gln Gln Gln Glu Gln Gln Gln Lys Pro Ala			
820	825	830	
Gln Ala Lys Thr Ser Lys Val Glu Ser Asp Gln Pro Gln Asn Ser Asn			
835	840	845	
Asp Ala Ser Glu Thr Lys Glu Asp Lys Ser Thr Ala Thr Glu Ser Thr			
850	855	860	
Lys Glu Glu Pro Gln Leu Glu Ser Lys Ser Ala Asp Phe Ser Asp Thr			
865	870	875	880
Tyr Val Val Pro Phe Val Lys Tyr Glu Phe Ile Cys Arg Lys Cys Gln			
885	890	895	
Met Met Phe Thr Asp Glu Asp Ala Ala Val Asn His Gln Lys Ser Phe			
900	905	910	
Cys Tyr Phe Gly Gln Pro Leu Ile Asp Pro Gln Glu Thr Val Leu Arg			
915	920	925	
Val Pro Val Ser Lys Tyr Gln Cys Leu Ala Cys Asp Val Ala Ile Ser			
930	935	940	
Gly Asn Glu Ala Leu Ser Gln His Leu Gln Ser Ser Leu His Lys Glu			
945	950	955	960
Lys Thr Ile Lys Gln Ala Met Arg Asn Ala Lys Glu His Val Arg Leu			
965	970	975	
Leu Pro His Ser Val Cys Ser Pro Asn Pro Asn Thr Thr Ser Thr Ser			
980	985	990	
Gln Ser Ala Ala Ser Ser Asn Asn Thr Tyr Pro His Leu Ser Cys Phe			

995 1000 1005
 Ser Met Lys Ser Trp Pro Asn Ile Leu Phe Gln Ala Ser Ala Arg Arg
 1010 1015 1020
 Ala Ala Ser Pro Pro Ser Ser Pro Pro Ser Leu Ser Leu Pro Ser Thr
 1025 1030 1035 1040
 Val Thr Ser Ser Leu Cys Ser Thr Ser Gly Val Gln Thr Ser Leu Pro
 1045 1050 1055
 Thr Glu Ser Cys Ser Asp Glu Ser Asp Ser Glu Leu Ser Gln Lys Leu
 1060 1065 1070
 Glu Asp Leu Asp Asn Ser Leu Glu Val Lys Ala Lys Pro Ala Ser Gly
 1075 1080 1085
 Leu Asp Gly Asn Phe Asn Ser Ile Arg Met Asp Met Phe Ser Val
 1090 1095 1100

<210> 4918

<211> 727

<212> PRT

<213> Homo sapiens

<400> 541

Met Gln Gln Lys Thr Lys Leu Phe Pro Gln Ala Leu Lys Tyr Ser Ile
 1 5 10 15
 Pro His Leu Gly Lys Cys Met Gln Lys Gln His Leu Asn His Tyr Asn
 20 25 30
 Phe Ala Asp His Cys Tyr Asn Arg Ile Lys Leu Lys Lys Tyr His Leu
 35 40 45
 Thr Lys Cys Leu Gln Asn Lys Pro Lys Ile Ser Glu Leu Ala Arg Asn
 50 55 60
 Ile Pro Ser Arg Ser Phe Ser Cys Lys Asp Leu Gln Pro Val Lys Gln
 65 70 75 80
 Glu Asn Glu Lys Pro Leu Pro Glu Asn Thr Asp Ala Phe Glu Lys Val
 85 90 95
 Arg Thr Lys Leu Glu Thr Gln Pro Gln Glu Glu Tyr Glu Ile Ile Asn
 100 105 110

Val Glu Val Lys His Gly Gly Phe Val Tyr Tyr Gln Glu Gly Cys Cys
 115 120 125
 Leu Val Arg Ser Lys Asp Glu Glu Ala Asp Asn Asp Asn Tyr Glu Val
 130 135 140
 Leu Phe Asn Leu Glu Glu Leu Lys Leu Asp Gln Pro Phe Ile Asp Cys
 145 150 155 160
 Ile Arg Val Ala Pro Asp Glu Lys Tyr Val Ala Ala Lys Ile Arg Thr
 165 170 175
 Glu Asp Ser Glu Ala Ser Thr Cys Val Ile Ile Lys Leu Ser Asp Gln
 180 185 190
 Pro Val Met Glu Ala Ser Phe Pro Asn Val Ser Ser Phe Glu Trp Val
 195 200 205
 Lys Asp Glu Glu Asp Glu Asp Val Leu Phe Tyr Thr Phe Gln Arg Asn
 210 215 220
 Leu Arg Cys His Asp Val Tyr Arg Ala Thr Phe Gly Asp Asn Lys Arg
 225 230 235 240
 Asn Glu Arg Phe Tyr Thr Glu Lys Asp Pro Ser Tyr Phe Val Phe Leu
 245 250 255
 Tyr Leu Thr Lys Asp Ser Arg Phe Leu Thr Ile Asn Ile Met Asn Lys
 260 265 270
 Thr Thr Ser Glu Val Trp Leu Ile Asp Gly Leu Ser Pro Trp Asp Pro
 275 280 285
 Pro Val Leu Ile Gln Lys Arg Ile His Gly Ile Leu Tyr Tyr Val Glu
 290 295 300
 His Arg Asp Asp Glu Leu Tyr Ile Leu Thr Asn Val Gly Glu Pro Thr
 305 310 315 320
 Glu Phe Lys Leu Met Arg Thr Ala Ala Asp Thr Pro Ala Ile Met Asn
 325 330 335
 Trp Asp Leu Phe Phe Thr Met Lys Arg Asn Thr Lys Val Ile Asp Leu
 340 345 350
 Asp Met Phe Lys Asp His Cys Val Leu Phe Leu Lys His Ser Asn Leu
 355 360 365
 Leu Tyr Val Asn Val Ile Gly Leu Ala Asp Asp Ser Val Arg Ser Leu
 370 375 380
 Lys Leu Pro Pro Trp Ala Cys Gly Phe Ile Met Asp Thr Asn Ser Asp
 385 390 395 400

Pro Lys Asn Cys Pro Phe Gln Leu Cys Ser Pro Ile Arg Pro Pro Lys
 405 410 415
 Tyr Tyr Thr Tyr Lys Phe Ala Glu Gly Lys Leu Phe Glu Glu Thr Gly
 420 425 430
 His Glu Asp Pro Ile Thr Lys Thr Ser Arg Val Leu Arg Leu Glu Ala
 435 440 445
 Lys Ser Lys Asp Gly Lys Leu Val Pro Met Thr Val Phe His Lys Thr
 450 455 460
 Asp Ser Glu Asp Leu Gln Lys Lys Pro Leu Leu Val His Val Tyr Gly
 465 470 475 480
 Ala Tyr Gly Met Asp Leu Lys Met Asn Phe Arg Pro Glu Arg Arg Val
 485 490 495
 Leu Val Asp Asp Gly Trp Ile Leu Ala Tyr Cys His Val Arg Gly Gly
 500 505 510
 Gly Glu Leu Gly Leu Gln Trp His Ala Asp Gly Arg Leu Thr Lys Lys
 515 520 525
 Leu Asn Gly Leu Ala Asp Leu Glu Ala Cys Ile Lys Thr Leu His Gly
 530 535 540
 Gln Gly Phe Ser Gln Pro Ser Leu Thr Thr Leu Thr Ala Phe Ser Ala
 545 550 555 560
 Gly Gly Val Leu Ala Gly Ala Leu Cys Asn Ser Asn Pro Glu Leu Val
 565 570 575
 Arg Ala Val Thr Leu Glu Ala Pro Phe Leu Asp Val Leu Asn Thr Met
 580 585 590
 Met Asp Thr Thr Leu Pro Leu Thr Leu Glu Glu Leu Glu Glu Trp Gly
 595 600 605
 Asn Pro Ser Ser Asp Glu Lys His Lys Asn Tyr Ile Lys Arg Tyr Cys
 610 615 620
 Pro Tyr Gln Asn Ile Lys Pro Gln His Tyr Pro Ser Ile His Ile Thr
 625 630 635 640
 Ala Tyr Glu Asn Asp Glu Arg Val Pro Leu Lys Gly Ile Val Ser Tyr
 645 650 655
 Thr Glu Lys Leu Lys Glu Ala Ile Ala Glu His Ala Lys Asp Thr Gly
 660 665 670
 Glu Gly Tyr Gln Thr Pro Asn Ile Ile Leu Asp Ile Gln Pro Gly Gly
 675 680 685

Asn His Val Ile Glu Asp Ser His Lys Lys Ile Thr Ala Gln Ile Lys
 690 695 700
 Phe Leu Tyr Glu Glu Leu Gly Leu Asp Ser Thr Ser Val Phe Glu Asp
 705 710 715 720
 Leu Lys Lys Tyr Leu Lys Phe
 725

<210> 4919

<211> 378

<212> PRT

<213> Homo sapiens

<400> 542

Met Glu Asp Arg Asp Glu Ser Glu Val Ser Asp Glu Gly Gly Ser Pro
 1 5 10 15
 Ile Ser Ser Glu Gly Gln Glu Pro Arg Ala Asp Pro Glu Pro Pro Gly
 20 25 30
 Leu Ala Ala Gly Leu Val Gln Gln Asp Leu Val Phe Glu Val Glu Thr
 35 40 45
 Pro Ala Val Leu Pro Glu Pro Val Pro Gln Glu Asp Gly Val Asp Leu
 50 55 60
 Leu Gly Leu His Ser Glu Val Gly Ala Gly Pro Ala Val Pro Pro Gln
 65 70 75 80
 Ala Cys Lys Ala Pro Ser Ser Asn Thr Asp Leu Leu Ser Cys Leu Leu
 85 90 95
 Gly Pro Pro Glu Ala Ala Ser Gln Gly Pro Pro Glu Asp Leu Leu Ser
 100 105 110
 Glu Asp Pro Leu Leu Leu Ala Ser Pro Ala Pro Pro Leu Ser Val Gln
 115 120 125
 Ser Thr Pro Arg Gly Gly Pro Pro Ala Ala Ala Asp Pro Phe Gly Pro
 130 135 140
 Leu Leu Pro Ser Ser Gly Asn Asn Ser Gln Pro Cys Ser Asn Pro Asp
 145 150 155 160
 Leu Phe Gly Glu Phe Leu Asn Ser Asp Ser Val Thr Val Pro Pro Ser
 165 170 175

Phe Pro Ser Ala His Ser Ala Pro Pro Pro Ser Cys Ser Ala Asp Phe
 180 185 190
 Leu His Leu Gly Asp Leu Pro Gly Glu Pro Ser Lys Met Thr Ala Ser
 195 200 205
 Ser Ser Asn Pro Asp Leu Leu Gly Gly Trp Ala Ala Trp Thr Glu Thr
 210 215 220
 Ala Ala Ser Ala Val Ala Pro Thr Pro Ala Thr Glu Gly Ser Pro Ala
 225 230 235 240
 Gly Phe Pro Pro Gly Gly Phe Ile Pro Lys Thr Ala Thr Thr Pro Lys
 245 250 255
 Gly Ser Ser Ser Trp Gln Thr Ser Arg Pro Pro Ala Gln Gly Ala Ser
 260 265 270
 Trp Pro Pro Gln Ala Lys Pro Pro Pro Lys Ala Cys Thr Gln Pro Arg
 275 280 285
 Pro Asn Tyr Ala Ser Asn Phe Ser Val Ile Gly Ala Arg Glu Glu Arg
 290 295 300
 Gly Val Arg Ala Pro Ser Phe Gly Glu Ser Pro Thr Leu Cys Cys Cys
 305 310 315 320
 Gly Val Cys Arg Asp Leu Pro Glu Leu Ala Lys Gly Arg Thr Tyr Val
 325 330 335
 Val Phe Phe Ile Ser Glu Pro Ser Pro Gly Thr Gly Thr Ala Lys Pro
 340 345 350
 Leu Arg Glu Arg Arg Gly Phe Arg Cys Val Phe Thr Gly Leu Ser Leu
 355 360 365
 Gly Gln Ala Ser Gly Ser Leu Leu Phe Gln
 370 375

<210> 4920

<211> 168

<212> PRT

<213> Homo sapiens

<400> 543

Met Glu Glu Ile Arg Phe Pro Arg Thr Leu Gly Pro Glu Ala Lys Ser
 1 5 10 15

Leu Leu Ser Gly Leu Leu Lys Lys Asp Pro Lys Gln Arg Leu Gly Gly
 20 25 30
 Gly Ser Glu Asp Ala Lys Glu Ile Met Gln His Arg Phe Phe Ala Gly
 35 40 45
 Ile Val Trp Gln His Val Tyr Glu Lys Lys Val Arg Leu Leu Pro Ala
 50 55 60
 Tyr Ser Arg Ala Arg Met Leu Pro Thr Tyr Pro His Ser Arg Met His
 65 70 75 80
 Val Ala Arg Ser Pro Asp Phe Pro His Thr Arg Pro His Leu Arg Ser
 85 90 95
 Leu Leu Gln Ser Trp Tyr Lys Glu Gly Leu Ala Ala Pro Thr Ser Ala
 100 105 110
 Pro Gly Ala Gln Arg Leu Trp His Cys Arg Val Pro Pro Gly Asn Trp
 115 120 125
 Pro Gly Pro His Phe Leu Leu Pro Ser Glu Val Cys His Thr Leu Ser
 130 135 140
 Phe Leu Leu Pro Ser Glu Val Cys His Thr Leu Ser Ala Ser Leu Gly
 145 150 155 160
 Val Pro Phe Pro Asp Ala Val Gln
 165

<210> 4921

<211> 219

<212> PRT

<213> Homo sapiens

<400> 544

Met Val Gly Gly Arg Ser Cys Pro Leu Arg Gln Val Trp Val Gly Asn
 1 5 10 15
 Lys Ser Gly Leu Leu Val Gly Ala Glu Ala Gly Gly Ser Ala Ala Asp
 20 25 30
 Gly Val Thr Pro Pro Gln Glu Cys Ile Leu Ser Gly Ile Met Ser Val
 35 40 45
 Asn Gly Lys Lys Val Leu His Met Asp Arg Asn Pro Tyr Tyr Gly Gly
 50 55 60

Glu Ser Ser Ser Ile Thr Pro Leu Glu Glu Leu Tyr Lys Arg Phe Gln
 65 70 75 80
 Leu Leu Glu Gly Pro Pro Glu Ser Met Gly Arg Gly Arg Asp Trp Asn
 85 90 95
 Val Asp Leu Ile Pro Lys Phe Leu Met Ala Asn Gly Gln Leu Val Lys
 100 105 110
 Met Leu Leu Tyr Thr Glu Val Thr Arg Tyr Leu Asp Phe Lys Val Val
 115 120 125
 Glu Gly Ser Phe Val Tyr Lys Gly Gly Lys Ile Tyr Arg Val Pro Ser
 130 135 140
 Thr Glu Thr Glu Ala Leu Ala Ser Asn Leu Met Gly Met Phe Glu Lys
 145 150 155 160
 Arg Arg Phe Arg Lys Phe Leu Val Phe Val Ala Asn Phe Asp Glu Asn
 165 170 175
 Asp Pro Lys Thr Phe Glu Gly Val Asp Pro Gln Thr Thr Ser Met Arg
 180 185 190
 Asp Val Tyr Arg Lys Phe Asp Leu Gly Gln Asp Val Ile Asp Phe Thr
 195 200 205
 Gly His Ala Leu Ala Leu Tyr Arg Thr Asp Glu
 210 215

<210> 4922

<211> 419

<212> PRT

<213> Homo sapiens

<400> 545

Met Leu Arg Cys Phe His Ser Lys Gly Val Asn Tyr Ile Asn Phe Ser
 1 5 10 15
 Ala Thr Gly Lys Leu Leu Val Ser Val Gly Val Asp Pro Glu His Thr
 20 25 30
 Ile Thr Val Trp Arg Trp Gln Glu Gly Ala Lys Val Ala Ser Arg Gly
 35 40 45
 Gly His Leu Glu Arg Ile Phe Val Val Glu Phe Arg Pro Asp Ser Asp
 50 55 60

Thr Gln Phe Val Ser Val Gly Val Lys His Met Lys Phe Trp Thr Leu
 65 70 75 80
 Ala Gly Ser Ala Leu Leu Tyr Lys Lys Gly Val Ile Gly Ser Leu Gly
 85 90 95
 Ala Ala Lys Met Gln Thr Met Leu Ser Val Ala Phe Gly Ala Asn Asn
 100 105 110
 Leu Thr Phe Thr Gly Ala Ile Asn Gly Asp Val Tyr Val Trp Lys Asp
 115 120 125
 His Phe Leu Ile Arg Leu Val Ala Lys Ala His Thr Gly Pro Val Phe
 130 135 140
 Thr Met Tyr Thr Thr Leu Arg Asp Gly Leu Ile Val Thr Gly Gly Lys
 145 150 155 160
 Glu Arg Pro Thr Lys Glu Gly Gly Ala Val Lys Leu Trp Asp Gln Glu
 165 170 175
 Met Lys Arg Cys Arg Ala Phe Gln Leu Glu Thr Gly Gln Leu Val Glu
 180 185 190
 Cys Val Arg Ser Val Cys Arg Gly Lys Gly Lys Ile Leu Val Gly Thr
 195 200 205
 Lys Asp Gly Glu Ile Ile Glu Val Gly Glu Lys Asn Ala Ala Ser Asn
 210 215 220
 Ile Leu Ile Asp Gly His Met Glu Gly Glu Ile Trp Gly Leu Ala Thr
 225 230 235 240
 His Pro Ser Lys Asp Leu Phe Ile Ser Ala Ser Asn Asp Gly Thr Ala
 245 250 255
 Arg Ile Trp Asp Leu Ala Asp Lys Lys Leu Leu Asn Lys Val Ser Leu
 260 265 270
 Gly His Ala Ala Arg Cys Ala Ala Tyr Ser Pro Asp Gly Glu Met Val
 275 280 285
 Ala Ile Gly Met Lys Asn Gly Glu Phe Val Ile Leu Leu Val Asn Ser
 290 295 300
 Leu Lys Val Trp Gly Lys Lys Arg Asp Arg Lys Ser Ala Ile Gln Asp
 305 310 315 320
 Ile Arg Ile Ser Pro Asp Asn Arg Phe Leu Ala Val Gly Ser Ser Glu
 325 330 335
 His Thr Val Asp Phe Tyr Asp Leu Thr Gln Gly Thr Asn Leu Asn Arg

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          340          345          350
Ile Gly Tyr Cys Lys Asp Ile Pro Ser Phe Val Ile Gln Met Asp Phe
          355          360          365
Ser Ala Asp Gly Glu Tyr Ile Gln Met Gln Leu Thr Leu Leu Val Gly
          370          375          380
Asn His Thr Gln Arg Thr Ala Ile Leu Gly Leu Trp Lys Ile Ala Arg
385          390          395          400
Lys Trp Met Arg Arg Lys Met Gly Lys Trp Pro Ala Val Val Val Met
          405          410          415
Gly Trp Pro

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<210> 4923

<211> 699

<212> PRT

<213> Homo sapiens

<400> 546

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Met Asn Thr Phe Gln Ala Ser Val Ser Phe Gln Asp Val Thr Val Glu
  1          5          10          15
Phe Ser Gln Glu Glu Trp Gln His Met Gly Pro Val Glu Arg Thr Leu
          20          25          30
Tyr Arg Asp Val Met Leu Glu Asn Tyr Ser His Leu Val Ser Val Gly
          35          40          45
Tyr Cys Phe Thr Lys Pro Glu Leu Ile Phe Thr Leu Glu Gln Gly Glu
          50          55          60
Asp Pro Trp Leu Leu Glu Lys Glu Lys Gly Phe Leu Ser Arg Asn Ser
          65          70          75          80
Pro Glu Asp Ser Gln Pro Asp Glu Ile Ser Glu Lys Ser Pro Glu Asn
          85          90          95
Gln Gly Lys His Leu Leu Gln Val Leu Phe Thr Asn Lys Leu Leu Thr
          100          105          110
Thr Glu Gln Glu Ile Ser Gly Lys Pro His Asn Arg Asp Ile Asn Ile
          115          120          125
Phe Arg Ala Arg Met Met Pro Cys Lys Cys Asp Ile Ala Gly Ser Ala

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130	135	140	
Cys Gln Gly Leu Ser Leu Met Ala Pro His Cys Gln Tyr Ser Lys Glu			
145	150	155	160
Lys Ala His Glu Arg Asn Val Cys Asp Lys Trp Leu Ile Ser Ile Lys			
	165	170	175
Asp Gly Arg Thr Asn Thr Gln Glu Lys Ser Phe Ala Tyr Ser Lys Ile			
	180	185	190
Val Lys Thr Leu His His Lys Glu Glu Val Ile Gln His Gln Thr Ile			
	195	200	205
Gln Thr Leu Gly Gln Asp Phe Glu Tyr Asn Glu Ser Arg Lys Ala Phe			
210	215	220	
Leu Glu Lys Ala Ala Leu Val Thr Ser Asn Ser Thr His Pro Lys Gly			
225	230	235	240
Lys Ser Tyr Asn Phe Asn Lys Phe Gly Glu Asn Lys Tyr Asp Lys Ser			
	245	250	255
Thr Phe Ile Ile Pro Gln Asn Met Asn Pro Glu Lys Ser His Tyr Glu			
	260	265	270
Phe Asn Asp Thr Gly Asn Cys Phe Cys Arg Ile Thr His Lys Thr Leu			
	275	280	285
Thr Gly Gly Lys Ser Phe Ser Gln Lys Ser His Ile Arg Glu His His			
290	295	300	
Arg Val His Ile Gly Val Lys Pro Phe Glu Tyr Gly Lys Ser Phe Asn			
305	310	315	320
Arg Asn Ser Thr Leu Pro Val His Gln Arg Thr His Ala Thr Asp Lys			
	325	330	335
Tyr Ser Asp Tyr His Pro Cys Thr Glu Thr Phe Ser Tyr Gln Ser Thr			
	340	345	350
Phe Ser Val His Gln Lys Val His Ile Arg Ala Lys Pro Tyr Glu Tyr			
	355	360	365
Asn Glu Cys Gly Lys Ser Cys Ser Met Asn Ser His Leu Ile Trp Pro			
370	375	380	
Gln Lys Ser His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Gly			
385	390	395	400
Lys Ala Phe Ser Glu Lys Ser Arg Leu Arg Lys His Gln Arg Thr His			
	405	410	415
Thr Gly Glu Lys Pro Tyr Lys Cys Asp Gly Cys Asp Lys Ala Phe Ser			

420	425	430
Ala Lys Ser Gly Leu Arg Ile His Gln Arg Thr His Thr Gly Glu Lys		
435	440	445
Pro Phe Glu Cys His Glu Cys Gly Lys Ser Phe Asn Tyr Lys Ser Ile		
450	455	460
Leu Ile Val His Gln Arg Thr His Thr Gly Glu Lys Pro Phe Glu Cys		
465	470	475
Asn Glu Cys Gly Lys Ser Phe Ser His Met Ser Gly Leu Arg Asn His		
485	490	495
Arg Arg Thr His Thr Gly Glu Arg Pro Tyr Lys Cys Asp Glu Cys Gly		
500	505	510
Lys Ala Phe Lys Leu Lys Ser Gly Leu Arg Lys His His Arg Thr His		
515	520	525
Thr Gly Glu Lys Pro Tyr Lys Cys Asn Gln Cys Gly Lys Ala Phe Gly		
530	535	540
Gln Lys Ser Gln Leu Arg Gly His His Arg Ile His Thr Gly Glu Lys		
545	550	555
Pro Tyr Lys Cys Asn His Cys Gly Glu Ala Phe Ser Gln Lys Ser Asn		
565	570	575
Leu Arg Val His His Arg Thr His Thr Gly Glu Lys Pro Tyr Gln Cys		
580	585	590
Glu Glu Cys Gly Lys Thr Phe Arg Gln Lys Ser Asn Leu Arg Gly His		
595	600	605
Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly		
610	615	620
Lys Ala Phe Ser Glu Lys Ser Val Leu Arg Lys His Gln Arg Thr His		
625	630	635
Thr Gly Glu Lys Pro Tyr Asn Cys Asn Gln Cys Gly Glu Ala Phe Ser		
645	650	655
Gln Lys Ser Asn Leu Arg Val His Gln Arg Thr His Thr Gly Glu Lys		
660	665	670
Pro Tyr Lys Cys Asp Lys Cys Gly Arg Thr Phe Ser Gln Lys Ser Ser		
675	680	685
Leu Arg Glu His Gln Lys Ala His Pro Gly Asp		
690	695	

<210> 4924

<211> 319

<212> PRT

<213> Homo sapiens

<400> 547

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Met Glu Tyr Pro Ala Pro Ala Thr Val Gln Ala Ala Asp Gly Gly Ala
  1              5              10              15
Ala Gly Pro Tyr Ser Ser Ser Glu Leu Leu Glu Gly Gln Glu Pro Asp
      20              25              30
Gly Val Arg Phe Asp Arg Glu Arg Ala Arg Arg Leu Trp Glu Ala Val
      35              40              45
Ser Gly Ala Gln Pro Val Gly Arg Glu Glu Ala Gln Phe Phe Pro His
      50              55              60
Ser Arg Thr Val Ile Pro Ile Leu Val Leu Ser Glu Thr Tyr Ser Leu
      65              70              75              80
Cys His Pro Val Glu His Met Ile Gln Lys Asn Gln Cys Leu Phe Thr
      85              90              95
Asn Thr Gln Cys Lys Val Cys Cys Ala Leu Leu Ile Ser Glu Ser Gln
      100             105             110
Lys Leu Ala His Tyr Gln Ser Lys Lys His Ala Asn Lys Val Lys Arg
      115             120             125
Tyr Leu Ala Ile His Gly Met Glu Thr Leu Lys Gly Glu Thr Lys Lys
      130             135             140
Leu Asp Ser Asp Gln Lys Ser Ser Arg Ser Lys Asp Lys Asn Gln Cys
      145             150             155             160
Cys Pro Ile Cys Asn Met Thr Phe Ser Ser Pro Val Val Ala Gln Ser
      165             170             175
His Tyr Leu Gly Lys Thr His Ala Lys Asn Leu Lys Leu Lys Gln Gln
      180             185             190
Ser Thr Lys Val Glu Ala Leu His Gln Asn Arg Glu Met Ile Asp Pro
      195             200             205
Asp Lys Phe Cys Ser Leu Cys His Ala Thr Phe Asn Asp Pro Val Met
      210             215             220
Ala Gln Gln His Tyr Val Gly Lys Lys His Arg Lys Gln Glu Thr Lys

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225 230 235 240
 Leu Lys Leu Met Ala Arg Tyr Gly Arg Leu Ala Asp Pro Ala Val Thr
 245 250 255
 Asp Phe Pro Ala Gly Lys Gly Tyr Pro Cys Lys Thr Cys Lys Ile Val
 260 265 270
 Leu Asn Ser Ile Glu Gln Tyr Gln Ala His Val Ser Gly Phe Lys His
 275 280 285
 Lys Asn Gln Ser Pro Lys Thr Val Ala Ser Ser Leu Gly Gln Ile Pro
 290 295 300
 Met Gln Arg Gln Pro Ile Gln Lys Asp Ser Thr Thr Leu Glu Asp
 305 310 315

<210> 4925

<211> 458

<212> PRT

<213> Homo sapiens

<400> 548

Met Glu Ser Asn Phe Asn Thr Glu Ser Ser Ser Thr Phe Thr Leu Gln
 1 5 10 15
 Ser Ser Ser Glu Thr Leu Phe Ser Ile Gln Leu Leu Asp Phe Lys Thr
 20 25 30
 Ser Leu Leu Glu Ala Leu Glu Glu Leu Arg Met Arg Arg Glu Ala Glu
 35 40 45
 Ile His Tyr Glu Glu Gln Ile Gly Lys Ile Ile Val Glu Thr Gln Glu
 50 55 60
 Leu Lys Trp Gln Lys Glu Thr Leu Gln Asn Gln Lys Glu Thr Leu Ala
 65 70 75 80
 Glu Gln His Lys Glu Ala Met Ala Val Phe Lys Lys Gln Leu Gln Met
 85 90 95
 Lys Met Cys Ala Leu Glu Glu Glu Lys Gly Lys Tyr Gln Leu Ala Thr
 100 105 110
 Glu Ile Lys Glu Lys Glu Ile Glu Gly Leu Lys Glu Thr Leu Lys Ala
 115 120 125
 Leu Gln Val Ser Lys Tyr Ser Leu Gln Lys Lys Val Ser Glu Met Glu

130	135	140	
Gln Lys Val Gln Leu His Leu Leu Ala Lys Glu Asp Tyr His Lys Gln			
145	150	155	160
Leu Ser Glu Ile Glu Lys Tyr Tyr Ala Thr Ile Thr Gly Gln Phe Gly			
	165	170	175
Leu Val Lys Glu Asn His Glu Lys Leu Glu Gln Asn Val Arg Glu Ala			
	180	185	190
Ile Gln Ser Asn Lys Arg Leu Ser Ala Leu Asn Lys Lys Gln Glu Ala			
	195	200	205
Glu Ile Cys Ser Leu Lys Lys Glu Leu Lys Lys Ala Ala Ser Asp Leu			
	210	215	220
Ile Lys Ser Lys Val Thr Cys Gln Tyr Lys Met Gly Glu Glu Asn Ile			
225	230	235	240
Asn Leu Thr Ile Lys Glu Gln Lys Phe Gln Glu Leu Gln Glu Arg Leu			
	245	250	255
Asn Met Glu Leu Glu Leu Asn Glu Lys Ile Asn Glu Glu Ile Thr His			
	260	265	270
Ile Gln Glu Glu Lys Gln Asp Ile Ile Ile Ser Phe Gln His Met Gln			
	275	280	285
Gln Leu Leu Arg Gln Gln Ile Gln Ala Asn Thr Glu Met Glu Ala Glu			
	290	295	300
Leu Lys Val Leu Lys Glu Asn Asn Gln Thr Leu Glu Arg Asp Asn Glu			
305	310	315	320
Leu Gln Arg Glu Lys Val Lys Glu Asn Glu Glu Lys Phe Leu Asn Leu			
	325	330	335
Gln Asn Glu His Glu Lys Ala Leu Gly Thr Trp Lys Arg His Ala Glu			
	340	345	350
Glu Leu Asn Gly Glu Ile Asn Lys Ile Lys Asn Glu Leu Ser Ser Leu			
	355	360	365
Lys Glu Thr His Ile Glu Leu Gln Glu His Tyr Asn Lys Leu Cys Asn			
	370	375	380
Gln Lys Thr Phe Glu Glu Asp Lys Lys Phe Gln Asn Val Pro Glu Val			
385	390	395	400
Asn Asn Glu Asn Ser Glu Met Ser Thr Glu Lys Ser Glu Asn Thr Ile			
	405	410	415
Ile Gln Lys Tyr Asn Thr Glu Gln Glu Ile Arg Glu Glu Asn Met Glu			

420 425 430
 Asn Phe Cys Ser Asp Thr Glu Tyr Arg Glu Lys Glu Glu Lys Lys Arg
 435 440 445
 Arg Leu Ile Tyr Arg Gly Asn Asn Tyr Arg
 450 455

<210> 4926

<211> 814

<212> PRT

<213> Homo sapiens

<400> 549

Met Val Lys Gln Thr Ile Gln Ile Phe Ala Arg Val Lys Pro Pro Val
 1 5 10 15
 Arg Lys His Gln Gln Gly Ile Tyr Ser Ile Asp Glu Asp Glu Lys Leu
 20 25 30
 Ile Pro Ser Leu Glu Ile Ile Leu Pro Arg Asp Leu Ala Asp Gly Phe
 35 40 45
 Val Asn Asn Lys Arg Glu Ser Tyr Lys Phe Lys Phe Gln Arg Ile Phe
 50 55 60
 Asp Gln Asp Ala Asn Gln Glu Thr Val Phe Glu Asn Ile Ala Lys Pro
 65 70 75 80
 Val Ala Gly Ser Val Leu Ala Gly Tyr Asn Gly Thr Ile Phe Ala Tyr
 85 90 95
 Gly Gln Thr Gly Ser Gly Lys Thr Phe Thr Ile Thr Gly Gly Ala Glu
 100 105 110
 Arg Tyr Ser Asp Arg Gly Ile Ile Pro Arg Thr Leu Ser Tyr Ile Phe
 115 120 125
 Glu Gln Leu Gln Lys Asp Ser Ser Lys Ile Tyr Thr Thr His Ile Ser
 130 135 140
 Tyr Leu Glu Ile Tyr Asn Glu Cys Gly Tyr Asp Leu Leu Asp Pro Arg
 145 150 155 160
 His Glu Ala Ser Ser Leu Glu Asp Leu Pro Lys Val Thr Ile Leu Glu
 165 170 175
 Asp Pro Asp Gln Asn Ile His Leu Lys Asn Leu Thr Leu His Gln Ala

180	185	190
Thr Thr Glu Glu Glu Ala Leu Asn Leu Leu Phe Leu Gly Asp Thr Asn		
195	200	205
Arg Met Ile Ala Glu Thr Pro Met Asn Gln Ala Ser Thr Arg Ser His		
210	215	220
Cys Ile Phe Thr Ile His Leu Ser Ser Lys Glu Pro Gly Ser Ala Thr		
225	230	235
Val Arg His Ala Lys Leu His Leu Val Asp Leu Ala Gly Ser Glu Arg		
245	250	255
Val Ala Lys Thr Gly Val Gly Gly His Leu Leu Thr Glu Ala Lys Tyr		
260	265	270
Ile Asn Leu Ser Leu His Tyr Leu Glu Gln Val Ile Ile Ala Leu Ser		
275	280	285
Glu Lys His Arg Ser His Ile Pro Tyr Arg Asn Ser Met Met Thr Ser		
290	295	300
Val Leu Arg Asp Ser Leu Gly Gly Asn Cys Met Thr Thr Met Ile Ala		
305	310	315
Thr Leu Ser Leu Glu Lys Arg Asn Leu Asp Glu Ser Ile Ser Thr Cys		
325	330	335
Arg Phe Ala Gln Arg Val Ala Leu Ile Lys Asn Glu Ala Val Leu Asn		
340	345	350
Glu Glu Ile Asn Pro Arg Leu Val Ile Lys Arg Leu Gln Lys Glu Ile		
355	360	365
Gln Glu Leu Lys Asp Glu Leu Ala Met Val Thr Gly Glu Gln Arg Thr		
370	375	380
Glu Ala Leu Thr Glu Ala Glu Leu Leu Gln Leu Glu Lys Leu Ile Thr		
385	390	395
Ser Phe Leu Glu Asp Gln Asp Ser Asp Ser Arg Leu Glu Val Gly Ala		
405	410	415
Asp Met Arg Lys Val His His Cys Phe His His Leu Lys Lys Leu Leu		
420	425	430
Asn Asp Lys Lys Ile Leu Glu Asn Asn Thr Val Ser Ser Glu Ser Lys		
435	440	445
Asp Gln Asp Cys Gln Glu Pro Leu Lys Glu Glu Glu Tyr Arg Lys Leu		
450	455	460
Arg Asp Ile Leu Lys Gln Arg Asp Asn Glu Ile Asn Ile Leu Val Asn		

465 470 475 480
 Met Leu Lys Lys Glu Lys Lys Lys Ala Gln Glu Ala Leu His Leu Ala
 485 490 495
 Gly Met Asp Arg Arg Glu Phe Arg Gln Ser Gln Ser Pro Pro Phe Arg
 500 505 510
 Leu Gly Asn Pro Glu Glu Gly Gln Arg Met Arg Leu Ser Ser Ala Pro
 515 520 525
 Ser Gln Ala Gln Asp Phe Ser Ile Leu Gly Lys Arg Ser Ser Leu Leu
 530 535 540
 His Lys Lys Ile Gly Met Lys Glu Glu Met Ser Leu Gly Cys Gln Glu
 545 550 555 560
 Ala Phe Glu Ile Phe Lys Arg Asp His Ala Asp Ser Val Thr Ile Asp
 565 570 575
 Asp Asn Lys Gln Ile Leu Lys Gln Arg Phe Ser Glu Ala Lys Ala Leu
 580 585 590
 Gly Glu Ser Ile Asn Glu Ala Arg Ser Lys Ile Gly His Leu Lys Glu
 595 600 605
 Glu Ile Thr Gln Arg His Ile Gln Gln Val Ala Leu Gly Ile Ser Glu
 610 615 620
 Asn Met Ala Val Pro Leu Met Pro Asp Gln Gln Glu Glu Lys Leu Arg
 625 630 635 640
 Ser Gln Leu Glu Glu Glu Lys Arg Arg Tyr Lys Thr Met Phe Thr Arg
 645 650 655
 Leu Lys Ala Leu Lys Val Glu Ile Glu His Leu Gln Leu Leu Met Asp
 660 665 670
 Lys Ala Lys Val Lys Leu Gln Lys Glu Phe Glu Val Trp Trp Ala Glu
 675 680 685
 Glu Ala Thr Asn Leu Gln Val Asn Ser Pro Ala Val Asn Ser Leu Asp
 690 695 700
 His Thr Lys Pro Phe Leu Gln Thr Ser Asp Phe Gln His Glu Arg Ser
 705 710 715 720
 Gln Leu Leu Ser Asn Lys Ser Ser Gly Gly Trp Glu Val Gln Asp Gln
 725 730 735
 Gly Thr Gly Arg Phe Asp Val Cys Asp Val Asn Ala Arg Lys Ile Leu
 740 745 750
 Pro Ser Pro Cys Pro Ser Pro His Ser Gln Lys Gln Ser Ser Thr Ser

755	760	765
Thr Pro Leu Gly Asp Ser Ile	Pro Lys Arg Pro Val	Ser Ser Ile Pro
770	775	780
Leu Thr Gly Asp Ser Gln Thr	Asp Ser Asp Ile Ile	Ala Phe Ile Lys
785	790	795
Ala Arg Gln Ser Ile	Leu Gln Lys Gln Cys	Leu Gly Ser Asn
805	810	

<210> 4927

<211> 503

<212> PRT

<213> Homo sapiens

<400> 550

Met Gly Ala Leu Thr Phe Arg	Asp Val Ala Ile Glu Phe	Ser Leu Glu
1	5	10
Glu Trp Gln Cys Leu Asp Thr	Glu Gln Gln Asn Leu Tyr	Arg Asn Val
20	25	30
Met Leu Asp Asn Tyr Arg Asn	Leu Val Phe Leu Gly Ile	Ala Val Ser
35	40	45
Lys Pro Asp Leu Ile Thr Cys	Leu Glu Gln Glu Lys Glu	Pro Trp Asn
50	55	60
Leu Lys Thr His Asp Met Val	Ala Lys Pro Pro Val Ile	Cys Ser His
65	70	75
Ile Ala Gln Asp Leu Trp Pro	Glu Gln Gly Ile Lys Asp	Tyr Phe Gln
85	90	95
Glu Val Ile Leu Arg Gln Tyr	Lys Lys Cys Arg His Glu	Asn Leu Leu
100	105	110
Leu Arg Lys Gly Cys Lys Asn	Val Asp Glu Phe Lys Met	His Lys Lys
115	120	125
Gly Tyr Asn Arg His Asn Gln	Cys Leu Thr Thr Ser His	Ser Lys Ile
130	135	140
Phe Gln Cys Asp Lys Tyr Val	Lys Val Phe His Lys Phe	Ser Asn Ser
145	150	155
Asn Arg His Lys Ile Arg His	Thr Ser Lys Lys Pro Phe	Lys Cys Lys

	165	170	175
Glu Cys Gly Lys Leu Phe Cys Ile Leu Ser His Leu Ala Gln His Lys			
180	185	190	
Lys Ile His Thr Gly Glu Lys Ser Tyr Lys Cys Glu Glu Tyr Gly Lys			
195	200	205	
Ala Phe Asn Glu Ser Ser Asn Cys Thr Thr His Lys Arg Ile Thr Glu			
210	215	220	
Lys Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Asn Trp Phe			
225	230	235	240
Ser His Phe Thr Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr			
245	250	255	
Gln Cys Glu Lys Cys Gly Lys Phe Phe Asn Gln Ser Thr Asn Leu Thr			
260	265	270	
Thr His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu			
275	280	285	
Cys Gly Lys Ala Phe Asn Gln Ser Ser Asn Leu Thr Glu His Lys Lys			
290	295	300	
Ile His Thr Lys Glu Gln Pro Tyr Lys Cys Glu Lys Cys Gly Lys Ala			
305	310	315	320
Phe Lys Trp Ser Ser Thr Leu Thr Lys His Lys Arg Ile His Asn Gly			
325	330	335	
Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Arg Ser			
340	345	350	
Ser Thr Leu Asn Arg His Lys Ile Thr His Thr Gly Gly Lys Pro Tyr			
355	360	365	
Lys Tyr Lys Glu Cys Gly Lys Ala Phe Asn Gln Ser Ser Thr Leu Thr			
370	375	380	
Ile His Lys Ile Ile His Thr Val Glu Lys Phe Tyr Lys Cys Glu Glu			
385	390	395	400
Cys Gly Lys Ala Phe Ser Arg Ile Ser His Leu Thr Thr His Lys Arg			
405	410	415	
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Arg Ala			
420	425	430	
Phe Asn Gln Ser Ser Thr Leu Thr Thr His Lys Arg Ile His Thr Gly			
435	440	445	
Glu Lys Pro Tyr Glu Cys Glu Glu Cys Gly Lys Ala Phe Asn Arg Ser			

450 455 460
 Ser Thr Leu Thr Thr His Lys Ile Ile His Ser Gly Glu Lys Ile Tyr
 465 470 475 480
 Lys Cys Lys Glu Cys Gly Lys Ala Phe Arg Arg Phe Ser His Leu Thr
 485 490 495
 Arg His Lys Thr Ile His Thr
 500

<210> 4928

<211> 388

<212> PRT

<213> Homo sapiens

<400> 551

Met Leu Leu Lys Glu Lys Glu Asp Ser Leu Met Thr Cys Gln Gln Ile
 1 5 10 15
 Tyr Lys Ala Leu Gln Glu Glu Leu Thr Val Lys Glu Lys Gln Glu Glu
 20 25 30
 Asp Ile Lys Arg Arg Ile Asn Leu Ala Glu Asn Glu Leu Glu Ile Thr
 35 40 45
 Lys Thr Leu Leu Asn Gln Thr Arg Glu Glu Val Leu Thr Leu Lys Asn
 50 55 60
 Glu Arg Glu Leu Met Leu Ile Ser His Gln Lys Ser Ile Glu Gln Leu
 65 70 75 80
 Gln Glu Thr Leu Arg Gln Lys Leu Leu Ser Asp Asp Asn Trp Lys Glu
 85 90 95
 Lys Ile Glu Ala Glu Leu Ala Lys Glu Arg Ala Gln His Leu Val Glu
 100 105 110
 Phe Glu Glu Gln Ala Leu Leu Phe Lys Glu Glu Thr Lys Leu Gln Leu
 115 120 125
 Asp Ile Glu Lys Glu Lys His Gln Asp Val Ile Gln Lys Tyr Lys Lys
 130 135 140
 Glu Gln Glu Glu Leu Gln Met Lys Ile Ser Asp Leu Ile Thr Gly Ala
 145 150 155 160
 Thr Arg Asp Leu Arg Gln Glu Val Thr Thr Leu Lys Glu Lys Leu His

	165		170		175
Lys Ser His Thr Arg Tyr Thr Glu Glu Ser Asn Ser Lys Glu Lys Glu					
	180		185		190
Ile Glu Asn Leu Lys Asn Leu Val Ala Glu Phe Glu Ser Arg Leu Lys					
	195		200		205
Lys Glu Ile Asp Ser Asn Asp Ser Val Ser Glu Asn Leu Arg Lys Glu					
	210		215		220
Met Glu Gln Lys Ser Asp Glu Leu Lys Arg Val Met Leu Ala Gln Thr					
225		230		235	240
Gln Leu Ile Glu Gln Phe Asn Gln Ser Gln Glu Glu Asn Thr Phe Leu					
	245		250		255
Gln Glu Thr Val Arg Arg Glu Cys Glu Glu Arg Phe Glu Leu Thr Glu					
	260		265		270
Ala Leu Ser Gln Ala Arg Glu Gln Leu Leu Glu Leu Ser Lys Leu Arg					
	275		280		285
Gly Ser Leu Pro Phe Ser Pro Cys Ser Leu Ser Lys Gly Ser Leu Thr					
	290		295		300
Ser Pro Ala Ala Ala Val Ser Asn His Gly Glu Arg Ser Leu Ala Arg					
305		310		315	320
Leu Asn Ser Glu Lys Gly Ile Gln Ile Pro Asn Leu Arg Gly Val Ser					
	325		330		335
Lys Pro Thr Thr Phe Pro Thr Ser Asp Lys Pro Lys Arg Val Arg Ser					
	340		345		350
Gly Val Pro Ile Leu Pro Gln Pro His Pro Pro Arg Gly Gly Ala Ser					
	355		360		365
Ser Ala Asn Glu Thr Arg Gln Arg Leu Ala Ala Ile Leu Arg Arg Arg					
	370		375		380
Arg Ser Gln Gln					
385					

<210> 4929

<211> 165

<212> PRT

<213> Homo sapiens

<400> 552

Met Asp Gly Pro Ala Thr Pro Val Ser Thr Asp Ser Asn Pro Pro Thr
 1 5 10 15
 Gln Gln Glu Asp Arg Ser Ala Cys Lys Cys Thr His Leu Glu Lys Arg
 20 25 30
 Leu Phe Pro Leu Leu Leu Val Ala Gln Leu Leu Leu Ser Pro Pro Gly
 35 40 45
 Ala Ala Ala Val Lys Cys Gln Leu Asp Pro Ala Lys Trp Gln Asp Pro
 50 55 60
 Gln His Ser Ser Ile Cys Ser Val Leu His Leu Arg His Trp Lys Gly
 65 70 75 80
 Cys Glu Pro Asp Ile Gly Ser Gln Ser Thr Cys Phe Pro Glu Pro Glu
 85 90 95
 Ser Cys Leu Pro Val Ala Ala Asp Thr Asp Ser Asn Val Thr Pro Ala
 100 105 110
 Thr Gln Gln Gln Arg Cys Cys Thr Leu Ala Cys Asn Leu Gly Thr Gly
 115 120 125
 Pro Leu His Leu Leu Leu Ser Leu Leu Met Gln Leu Gly Ala Arg Ala
 130 135 140

 Cys Ala Thr Gly Ser Asp Leu Thr Ser Thr Ser Ser Arg Ala Thr Val
 145 150 155 160
 Asn Leu His Val Pro
 165

<210> 4930

<211> 832

<212> PRT

<213> Homo sapiens

<400> 553

Met Ala Gly Leu Arg Tyr Ser Val Lys Val Tyr Val Leu Asn Glu Asp
 1 5 10 15
 Glu Glu Trp Asn Asn Leu Gly Thr Gly Gln Val Ser Ser Thr Tyr Asp
 20 25 30

Glu Gln Phe Gln Gly Met Ser Leu Leu Val Arg Ser Asp Ser Asp Gly
 35 40 45
 Ser Val Ile Leu Arg Ser Gln Ile Pro Pro Asp Arg Pro Tyr Gly Lys
 50 55 60
 Tyr Gln Glu Thr Leu Ile Val Trp Tyr Glu Ala Glu Asn Gln Gly Leu
 65 70 75 80
 Val Leu Lys Phe Gln Asp Pro Ala Gly Cys Gln Asp Ile Trp Lys Glu
 85 90 95
 Ile Cys Gln Ala Gln Gly Lys Asp Pro Ser Ile Gln Thr Thr Val Asn
 100 105 110
 Ile Ser Asp Glu Pro Glu Glu Asp Phe Asn Glu Met Ser Val Ile Ser
 115 120 125
 Asn Met Val Val Leu Pro Asp Cys Glu Leu Asn Thr Leu Asp Gln Ile
 130 135 140
 Ala Asp Ile Val Thr Ser Val Phe Ser Ser Pro Val Thr Asp Arg Glu
 145 150 155 160
 Arg Leu Ala Glu Ile Leu Lys Asn Glu Ala Tyr Ile Pro Lys Leu Leu
 165 170 175
 Gln Leu Phe His Thr Cys Glu Asn Leu Glu Asn Thr Glu Gly Leu His
 180 185 190
 His Leu Tyr Glu Ile Ile Lys Gly Ile Leu Phe Leu Asn Glu Ala Cys
 195 200 205
 Leu Phe Glu Ile Met Phe Ser Asp Glu Cys Ile Met Asp Val Val Gly
 210 215 220
 Cys Leu Glu Tyr Asp Pro Ala Leu Asp Gln Pro Lys Arg His Arg Asp
 225 230 235 240
 Phe Leu Thr Asn Asp Ala Lys Phe Lys Glu Val Ile Pro Ile Thr Asn
 245 250 255
 Ser Glu Leu Arg Gln Lys Ile His Gln Thr Tyr Arg Leu Gln Tyr Ile
 260 265 270
 Tyr Asp Ile Leu Leu Pro Val Pro Ser Ile Phe Glu Asp Asn Phe Leu
 275 280 285
 Ser Thr Leu Thr Thr Phe Ile Phe Ser Asn Lys Ala Glu Ile Val Ser
 290 295 300
 Met Leu Gln Lys Asp His Lys Phe Leu Tyr Glu Val Phe Ala Gln Leu
 305 310 315 320

Tyr Ile Arg Val Glu Asn Ile Lys Pro Leu Val Ser His Ile Val Glu
 610 615 620
 Lys Phe Tyr Asn Thr Leu Glu Ser Ile Glu Tyr Val Gln Thr Phe Lys
 625 630 635 640
 Gly Leu Lys Ile Lys Tyr Glu Lys Glu Arg Asp Arg Gln Ser Gln Ile
 645 650 655
 Gln Lys Asn Leu His Ser Val Leu Gln Asn Ile Val Val Phe Arg Gly
 660 665 670
 Thr Ile Glu Glu Ile Gly Leu Glu Glu Glu Ile Cys Phe Met Glu Asp
 675 680 685
 Ala Gly Glu Ala Val Met Pro Pro Leu Glu Asp Asp Asp Glu Phe Met
 690 695 700
 Glu Thr Lys Arg Thr Gln Glu Gly Glu Ala Val Met Pro Pro Leu Glu
 705 710 715 720
 Asp Asp Asp Lys Phe Thr Glu Thr Lys Arg Thr His Gln Glu Gly Glu
 725 730 735
 Ala Val Met Pro Pro Leu Glu Asp Asp Asp Glu Phe Met Glu Thr Lys
 740 745 750
 Arg Asn Gln Glu His Glu Gly Lys Val Asp Ser Pro Lys Arg Thr Ser
 755 760 765
 Ser Gly Asp Phe Lys Phe Ser Ser Ser Tyr Ser Ala Cys Ala Ala Ile
 770 775 780
 Gly Thr Gly Ser Pro Ser Gly Ser Ser Val Val Arg Leu Val Asp His
 785 790 795 800
 Pro Asp Asp Glu Glu Glu Lys Glu Glu Asp Glu Glu Glu Lys Glu Glu
 805 810 815
 Asp Lys Glu Asp Glu Thr Ser Pro Lys Lys Lys Pro His Leu Ser Ser
 820 825 830

<210> 4931

<211> 250

<212> PRT

<213> Homo sapiens

<400> 554

Met Phe His Gly Thr Val Thr Glu Glu Leu Thr Ser His Glu Glu Trp
 1 5 10 15
 Ser His Tyr Asn Glu Asn Ile Arg Glu Gly Gln Lys Asp Phe Val Phe
 20 25 30
 Val Lys Phe Asn Gly Leu His Leu Lys Ser Met Glu Asn Leu Gln Ser
 35 40 45
 Cys Ile Ser Leu Arg Val Cys Ile Phe Ser Asn Asn Phe Ile Thr Asp
 50 55 60
 Ile His Pro Leu Gln Ser Cys Ile Lys Leu Ile Lys Leu Asp Leu His
 65 70 75 80
 Gly Asn Gln Ile Lys Ser Leu Pro Asn Thr Lys Phe Trp Asn Gly Leu
 85 90 95
 Lys Asn Leu Lys Leu Leu Tyr Leu His Asp Asn Gly Phe Ala Lys Leu
 100 105 110
 Lys Asn Ile Cys Val Leu Ser Ala Cys Pro Thr Leu Ile Ala Leu Thr
 115 120 125
 Met Phe Asp Cys Pro Val Ser Leu Lys Lys Gly Tyr Arg His Val Leu
 130 135 140
 Val Asn Ser Ile Trp Pro Leu Lys Ala Leu Asp His His Val Ile Ser
 145 150 155 160
 Asp Glu Glu Ile Ile Gln Asn Trp His Leu Pro Glu Arg Phe Lys Ala
 165 170 175
 Cys Asn His Arg Leu Phe Phe Asn Phe Cys Pro Ala Leu Arg Lys Gly
 180 185 190
 Thr Thr Tyr Glu Glu Glu Ile Asn Asn Ile Lys His Ile Thr Ser Lys
 195 200 205
 Ile Asn Ala Ile Leu Ala His Asn Ser Pro Val Leu Ile Val Gln Arg
 210 215 220
 Trp Ile Arg Gly Phe Leu Val Arg Lys Asn Leu Ser Pro Val Phe Phe
 225 230 235 240
 His Lys Lys Lys Thr Ala Gly Lys Asn Tyr
 245 250

<210> 4932

<211> 788

<212> PRT

<213> Homo sapiens

<400> 555

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Met Ala Cys Leu Thr His Arg Asn Glu Thr Asp Ala Arg Met Glu Phe
  1             5             10             15
Tyr Ser Leu Phe His Lys Gly Asn Lys Ala Gly Val Gln Trp His Asp
      20             25             30
Leu Gly Ser Leu Gln Pro Leu Pro Pro Arg Phe Lys Arg Phe Ser Cys
      35             40             45
Leu Ser Leu Gln Ser Ser Trp Asp Tyr Ser Leu Ser Lys Phe Asp Glu
      50             55             60
Arg Cys Cys Phe Leu Tyr Val His Asp Asn Ser Asp Asp Phe Gln Ile
      65             70             75             80
Tyr Phe Ser Thr Glu Glu Gln Cys Ser Arg Phe Phe Ser Leu Val Lys
      85             90             95
Glu Met Ile Thr Asn Thr Ala Gly Ser Thr Val Glu Leu Glu Gly Glu
      100            105            110
Thr Asp Gly Asp Thr Leu Glu Tyr Glu Tyr Asp His Asp Ala Asn Gly
      115            120            125
Glu Arg Val Val Leu Gly Lys Gly Thr Tyr Gly Ile Val Tyr Ala Gly
      130            135            140
Arg Asp Leu Ser Asn Gln Val Arg Ile Ala Ile Lys Glu Ile Pro Glu
      145            150            155            160
Arg Asp Ser Arg Tyr Ser Gln Pro Leu His Glu Glu Ile Ala Leu His
      165            170            175
Lys Tyr Leu Lys His Arg Asn Ile Val Gln Tyr Leu Gly Ser Val Ser
      180            185            190
Glu Asn Gly Tyr Ile Lys Ile Phe Met Glu Gln Val Pro Gly Gly Ser
      195            200            205
Leu Ser Ala Leu Leu Arg Ser Lys Trp Gly Pro Met Lys Glu Pro Thr
      210            215            220
Ile Lys Phe Tyr Thr Lys Gln Ile Leu Glu Gly Leu Lys Tyr Leu His
      225            230            235            240
Glu Asn Gln Ile Val His Arg Asp Ile Lys Gly Asp Asn Val Leu Val
      245            250            255

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Asn Thr Tyr Ser Gly Val Val Lys Ile Ser Asp Leu Gly Thr Ser Lys
 260 265 270
 Arg Leu Ala Gly Val Asn Pro Cys Thr Glu Thr Phe Thr Gly Thr Leu
 275 280 285
 Gln Tyr Met Ala Pro Glu Ile Ile Asp Gln Gly Pro Arg Gly Tyr Gly
 290 295 300
 Ala Pro Ala Asp Ile Trp Ser Leu Gly Cys Thr Ile Ile Glu Met Ala
 305 310 315 320
 Thr Ser Lys Pro Pro Phe His Glu Leu Gly Glu Pro Gln Ala Ala Met
 325 330 335
 Phe Lys Val Gly Met Phe Lys Ile His Pro Glu Ile Pro Glu Ala Leu
 340 345 350
 Ser Ala Glu Ala Arg Ala Phe Ile Leu Ser Cys Phe Glu Pro Asp Pro
 355 360 365
 His Lys Arg Ala Thr Thr Ala Glu Leu Leu Arg Glu Gly Phe Leu Arg
 370 375 380
 Gln Val Asn Lys Gly Lys Lys Asn Arg Ile Ala Phe Lys Pro Ser Glu
 385 390 395 400
 Gly Pro Arg Gly Val Val Leu Ala Leu Pro Thr Gln Gly Glu Pro Met
 405 410 415
 Ala Thr Ser Ser Ser Glu His Gly Ser Val Ser Pro Asp Ser Asp Ala
 420 425 430
 Gln Pro Asp Ala Leu Phe Glu Arg Thr Arg Ala Pro Arg His His Leu
 435 440 445
 Gly His Leu Leu Ser Val Pro Asp Glu Ser Ser Ala Leu Glu Asp Arg
 450 455 460
 Gly Leu Ala Ser Ser Pro Glu Asp Arg Asp Gln Gly Leu Phe Leu Leu
 465 470 475 480
 Arg Lys Asp Ser Glu Arg Arg Ala Ile Leu Tyr Lys Ile Leu Trp Glu
 485 490 495
 Glu Gln Asn Gln Val Ala Ser Asn Leu Gln Glu Cys Val Ala Gln Ser
 500 505 510
 Ser Glu Glu Leu His Leu Ser Val Gly His Ile Lys Gln Ile Ile Gly
 515 520 525
 Ile Leu Arg Asp Phe Ile Arg Ser Pro Glu His Arg Val Met Ala Thr
 530 535 540

Thr Ile Ser Lys Leu Lys Val Asp Leu Asp Phe Asp Ser Ser Ser Ile
 545 550 555 560
 Ser Gln Ile His Leu Val Leu Phe Gly Phe Gln Asp Ala Val Asn Lys
 565 570 575
 Ile Leu Arg Asn His Leu Ile Arg Pro His Trp Met Phe Ala Met Asp
 580 585 590
 Asn Ile Ile Arg Arg Ala Val Gln Ala Ala Val Thr Ile Leu Ile Pro
 595 600 605
 Glu Leu Arg Ala His Phe Glu Pro Thr Cys Glu Thr Glu Gly Val Asp
 610 615 620
 Lys Asp Met Asp Glu Ala Glu Glu Gly Tyr Pro Pro Ala Thr Gly Pro
 625 630 635 640
 Gly Gln Glu Ala Gln Pro His Gln Gln His Leu Ser Leu Gln Leu Gly
 645 650 655
 Glu Leu Arg Gln Glu Thr Asn Arg Leu Leu Glu His Leu Val Glu Lys
 660 665 670
 Glu Arg Glu Tyr Gln Asn Leu Leu Arg Gln Thr Leu Glu Gln Lys Thr
 675 680 685
 Gln Glu Leu Tyr His Leu Gln Leu Lys Leu Lys Ser Asn Cys Ile Thr
 690 695 700
 Glu Asn Pro Ala Gly Pro Tyr Gly Gln Arg Thr Asp Lys Glu Leu Ile
 705 710 715 720
 Asp Trp Leu Arg Leu Gln Gly Ala Asp Ala Lys Thr Ile Glu Lys Ile
 725 730 735
 Val Glu Glu Gly Tyr Thr Leu Ser Asp Ile Leu Asn Glu Ile Thr Lys
 740 745 750
 Glu Asp Leu Arg Tyr Leu Arg Leu Arg Gly Gly Leu Leu Cys Arg Leu
 755 760 765
 Trp Ser Ala Val Ser Gln Tyr Arg Arg Ala Gln Glu Ala Ser Glu Thr
 770 775 780
 Lys Asp Lys Ala
 785

<210> 4933

<211> 266

<212> PRT

<213> Homo sapiens

<400> 556

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Met Leu Ile Asn Val Ile Ser Gly Ser Ser Tyr Met Ile His Ser Thr
  1             5             10             15
Gln Leu Ile Glu Asn Ala Glu Leu Arg Phe His Thr Asp Glu Gln Leu
      20             25             30
Met Thr Leu Phe Met Gln Leu Gln Thr Ala Val Arg Ser Arg Met His
      35             40             45
Pro Phe Tyr Ile Thr His Ile Arg Ala His Thr Pro Leu Pro Gly Pro
      50             55             60
Leu Thr Ala Gly Asn Gln Met Ala Asp Arg Leu Val Ala Thr Ala Ile
      65             70             75             80
Ser Asn Ala Arg His Phe His Asn Leu Thr Arg Val Asn Ala Ser Gly
      85             90             95
Leu Lys Arg Arg Tyr Ser Ser Thr Arg Lys Glu Ala Lys Ala Ile Ile
      100            105            110
Gln Arg Cys Pro Thr Cys Gln Met Val His Ser Ser Ser Phe Thr Gly
      115            120            125
Gly Val Asn Pro Arg Arg Leu Glu Pro Asn Ser Leu Trp Glu Met Asp
      130            135            140
Val Thr His Val Pro Ser Phe Gly Arg Leu Ala Tyr Val His Ala Cys
      145            150            155            160
Val Asp Thr Phe Ser Leu Trp Ala Ala Cys Gln Ser Gly Glu Ser Ser
      165            170            175
Ala Tyr Val Lys Arg His Leu Leu Gln Cys Phe Val Val Ile Gly Ile
      180            185            190
Leu Ala Ser Ile Lys Thr Asp Asn Ala Pro Gly Tyr Thr Ser Gln Ala
      195            200            205
Leu Ala Thr Phe Phe Ser Ile Arg Asn Ile Lys His Ile Thr Gly Ile
      210            215            220
Pro Tyr Asn Ser Gln Gly Gln Ala Ile Val Glu Arg Met Asn Leu Ser
      225            230            235            240
Leu Lys Gln Gln Leu Gln Lys Gln Lys Gly Glu Asn Arg Asp Tyr Gly
      245            250            255

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Thr Pro His Met Gln Leu Asn Arg Ile Ile

260

265

<210> 4934

<211> 279

<212> PRT

<213> Homo sapiens

<400> 557

Met Gly Thr Ser Cys Leu Pro Asp Thr Phe Thr Lys Leu Ile Asn Pro

1

5

10

15

Gln Glu Asn Thr Cys Ser Leu Glu Glu Phe Val Leu Gln Leu Glu Leu

20

25

30

Ser Gly Tyr Ser Pro Glu Asp Leu Thr Ala Ala Leu Glu Ile Leu Glu

35

40

45

Ala Ile Ile Ala Thr Gly Cys Phe Gly Ile Asp Lys Glu Glu Leu Arg

50

55

60

Arg Arg Phe Ser Ala Leu Glu Lys Ala Gly Gly Gly Arg Thr Arg Thr

65

70

75

80

Phe Ala Asp Cys Ile Gln Ala Leu Leu Glu Gln His Gln Val Leu Glu

85

90

95

Val Gly Gly Asn Thr Ala Arg Leu Val Ala Met Gly Ser Ala Trp Pro

100

105

110

Trp Leu Leu His Ser Val Arg Leu Lys Asp Arg Glu Asp Ala Asp Ile

115

120

125

Gln Arg Glu Asp Pro Gln Ala Arg Pro Leu Glu Gly Ser Ser Ser Glu

130

135

140

Asp Ser Pro Pro Glu Gly Gln Ala Pro Pro Ser His Ser Pro Arg Gly

145

150

155

160

Thr Lys Arg Arg Ala Ser Trp Ala Ser Glu Asn Gly Glu Thr Asp Ala

165

170

175

Glu Gly Thr Gln Met Thr Pro Ala Lys Arg Pro Ala Leu Gln Asp Ser

180

185

190

Asn Leu Ala Pro Ser Leu Gly Pro Gly Ala Glu Asp Gly Ala Glu Ala

195

200

205

Gln Ala Pro Ser Pro Pro Pro Ala Leu Glu Asp Thr Ala Ala Ala Gly
 210 215 220
 Ala Ala Gln Glu Asp Gln Glu Gly Val Gly Glu Phe Ser Ser Pro Gly
 225 230 235 240
 Gln Glu Gln Leu Ser Gly Gln Ala Gln Pro Pro Glu Gly Ser Glu Asp
 245 250 255
 Pro Arg Gly Thr Ala Arg Leu Val Pro His Pro Thr Ser Pro His Pro
 260 265 270
 Gly Phe Pro Ser Pro Pro Pro
 275

<210> 4935

<211> 325

<212> PRT

<213> Homo sapiens

<400> 558

Met Pro Ser Arg Ile Leu Asp Lys Glu Leu Leu Ser Gly Ile Pro Asp
 1 5 10 15
 Thr Glu Arg Leu Ser Glu Val Val Asp Asn Arg Ala Pro Gln Arg Asp
 20 25 30
 Pro Thr His Arg Ala Pro Gln Arg Asp Pro Thr His Arg Ala Pro Gln
 35 40 45
 Arg Asp Pro Thr His Arg Ala Pro Gln Arg Asp Pro Thr His Arg Ala
 50 55 60
 Pro Gln Arg Asp Pro Thr His Arg Ala Pro Gln Arg Asp Pro Thr His
 65 70 75 80
 Arg Pro Pro Gln Arg Asp Pro Thr His Arg Ala Pro Gln Arg Asp Pro
 85 90 95
 Thr His Arg Ala Pro Gln Arg Asp Pro Thr His Arg Ala Pro Gln Arg
 100 105 110
 Gly Pro Arg His Arg Ala Pro Gln Arg Ser Pro Arg His Arg Ala Pro
 115 120 125
 Gln Arg Asp Pro Thr His Arg Ala Pro Gln Arg Gly Pro Arg His Arg

130	135	140	
Ala Pro Gln Arg Asp Pro Thr His Arg Ala Pro Gln Arg Gly Pro Arg			
145	150	155	160
His Arg Ala Pro Gln Arg Gly Pro Thr His Arg Ala Pro Gln Arg Gly			
165	170	175	
Pro Arg His Arg Ala Pro Gln Arg Gly Pro Arg His Arg Ala Pro Gln			
180	185	190	
Arg Gly Pro Thr His Arg Ala Pro Gln Arg Asp Pro Gly Trp Arg Ala			
195	200	205	
Pro Gln Arg Gly Pro Thr His Arg Ala Pro Gln Arg Ile Leu Asp Ala			
210	215	220	
Glu Pro Val Ser Gly Phe Leu Asp Ala Glu Ser Leu Ser Gly Ile Leu			
225	230	235	240
Val Val Glu Arg Leu Ser Gly Ile Leu Asp Ala Glu Arg Leu Ser Gly			
245	250	255	
Ile Leu Asp Thr Glu Arg Leu Ser Leu Val Leu His Thr Glu Arg Leu			
260	265	270	
Ser Gly Ile Leu Val Gly Glu Arg Leu Ser Gly Val Leu His Thr Glu			
275	280	285	
Arg Leu Ser Gly Ile Leu Val Gly Glu Arg Leu Ser Gly Ile Leu Asp			
290	295	300	
Thr Glu Arg Leu Ser Gly Ile Leu Asp Thr Glu Pro Leu Ser Glu Ser			
305	310	315	320
Gln Ile His Ser Ala			
325			

<210> 4936

<211> 378

<212> PRT

<213> Homo sapiens

<400> 559

Met Met Leu Ser Arg Lys Leu Pro Val His Val Asp Asp Pro Leu Ser	
1	5 10 15
Thr Thr Leu Phe Ser Ser Gln Leu Asn Arg Arg Ile Ser Asn Met Asp	

20	25	30
Asp Lys Val Tyr Lys Met Ser Arg	Ala Leu Ala Glu Ile Lys Lys Arg	
35	40	45
Phe Gln Lys Thr Val Thr Gln Phe	Ile Asn Ser Ile Leu Leu Ala Ala	
50	55	60
Gly Leu Phe Thr Ile Glu Tyr Pro Thr	Lys Lys Glu Glu Glu Glu Phe	
65	70	75
Val Arg Phe Lys Met Arg Ser Arg Thr	His Pro Glu Arg Leu Pro Lys	
85	90	95
Leu Ser Leu Tyr Ser Gly Glu Ser Leu	Leu Arg Ser Gln Ser Gly His	
100	105	110
Leu Glu Ser Ser Ile Ala Glu Thr Leu	Lys Asp Glu Pro Glu Ser Ala	
115	120	125
Pro Val Ser Pro Val Arg Lys Thr Thr	Lys Ile His Thr Lys Ala Lys	
130	135	140
Val Thr Ser Arg Gly Lys Ala Arg Glu	Gly Arg Ser Pro Thr Arg Trp	
145	150	155
Ala Ala Leu Pro Ser Asp Cys Pro Leu	Val Leu Arg Lys Leu Met Leu	
165	170	175
Lys Glu Asp Thr Arg Ala Gly Cys Lys	Cys Leu Val Lys Ala Pro Leu	
180	185	190
Val Ser Asp Val Glu Leu Glu Arg Phe	Leu Leu Ala Pro Arg Asp Pro	
195	200	205
Ser Gln Val Leu Val Phe Gly Ile Ile	Ser Ser Gln Asn Tyr Thr Ser	
210	215	220
Thr Gly Gln Leu Gln Trp Leu Leu Asn	Thr Leu Tyr Asn His Gln Gln	
225	230	235
Arg Gly Arg Gly Ser Pro Cys Ile Gln	Cys Arg Tyr Asp Ser Tyr Arg	
245	250	255
Leu Leu Gln Tyr Asp Leu Asp Ser Pro	Leu Gln Glu Asp Pro Pro Leu	
260	265	270
Met Val Lys Lys Asn Ser Val Val Gln	Gly Met Ile Leu Met Phe Ala	
275	280	285
Gly Gly Lys Leu Ile Phe Gly Gly Arg	Val Leu Asn Gly Tyr Gly Leu	
290	295	300
Ser Lys Gln Asn Leu Leu Lys Gln Ile	Phe Arg Ser Gln Gln Asp Tyr	

305 310 315 320
 Lys Met Gly Tyr Phe Leu Pro Asp Asp Tyr Lys Phe Ser Val Pro Asn
 325 330 335
 Ser Val Leu Ser Leu Glu Asp Ser Glu Ser Val Lys Lys Ala Glu Ser
 340 345 350
 Glu Asp Ile Gln Gly Ser Ser Ser Ser Leu Ala Leu Glu Asp Tyr Val
 355 360 365
 Glu Lys Glu Leu Ser Leu Glu Ala Glu Lys
 370 375

<210> 4937

<211> 455

<212> PRT

<213> Homo sapiens

<400> 560

Met Gly Val Ile Ile Ser Gly Ser Leu Pro Pro Phe Ser Ser Pro Leu
 1 5 10 15
 Gln Val Gly Pro Val Ser Leu Leu Ala Ile Gly Val Leu Thr Val His
 20 25 30
 Cys Met Val Ile Leu Leu Asn Cys Ala Gln His Leu Ser Gln Arg Leu
 35 40 45
 Gln Lys Thr Phe Val Asn Tyr Gly Glu Ala Thr Met Tyr Gly Leu Glu
 50 55 60
 Thr Cys Pro Asn Thr Trp Leu Arg Ala His Ala Val Trp Gly Arg Trp
 65 70 75 80
 Asn Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Lys Ile Ser Ala
 85 90 95
 His Cys Asn Pro His Leu Gln Gly Ser Ser Asn Ser Pro Ala Gln Ala
 100 105 110
 Ser Arg Val Ala Gly Ile Tyr Arg Tyr Thr Val Ser Phe Leu Leu Val
 115 120 125
 Ile Thr Gln Leu Gly Phe Cys Ser Val Tyr Phe Met Phe Met Ala Asp
 130 135 140
 Asn Leu Gln Gln Met Val Glu Lys Ala His Val Thr Ser Asn Ile Cys

145	150	155	160
Gln Pro Arg Glu Ile Leu Thr Leu Thr Pro Ile Leu Asp Ile Arg Phe			
	165	170	175
Tyr Met Leu Ile Ile Leu Pro Phe Leu Ile Leu Leu Val Phe Ile Gln			
	180	185	190
Asn Leu Lys Val Leu Ser Val Phe Ser Thr Leu Ala Asn Ile Thr Thr			
	195	200	205
Leu Gly Ser Met Ala Leu Ile Phe Glu Tyr Ile Met Glu Gly Ile Pro			
	210	215	220
Tyr Pro Ser Asn Leu Pro Leu Met Ala Asn Trp Lys Thr Phe Leu Leu			
225	230	235	240
Phe Phe Gly Thr Ala Ile Phe Thr Phe Glu Gly Val Gly Met Val Leu			
	245	250	255
Pro Leu Lys Asn Gln Met Lys His Pro Gln Gln Phe Ser Phe Val Leu			
	260	265	270
Tyr Leu Gly Met Ser Ile Val Ile Ile Leu Tyr Ile Leu Leu Gly Thr			
	275	280	285
Leu Gly Tyr Met Lys Phe Gly Ser Asp Thr Gln Ala Ser Ile Thr Leu			
	290	295	300
Asn Leu Pro Asn Cys Trp Leu Tyr Gln Ser Val Lys Leu Met Tyr Ser			
305	310	315	320
Ile Gly Ile Phe Phe Thr Tyr Ala Leu Gln Phe His Val Pro Ala Glu			
	325	330	335
Ile Ile Ile Pro Phe Ala Ile Ser Gln Val Ser Glu Ser Trp Ala Leu			
	340	345	350
Phe Val Asp Leu Ser Val Arg Ser Ala Leu Val Cys Leu Thr Cys Val			
	355	360	365
Ser Ala Ile Leu Ile Pro Arg Leu Asp Leu Val Ile Ser Leu Val Gly			
	370	375	380
Ser Val Ser Ser Ser Ala Leu Ala Leu Ile Ile Pro Ala Leu Leu Glu			
385	390	395	400
Ile Val Ile Phe Tyr Ser Glu Asp Met Ser Cys Val Thr Ile Ala Lys			
	405	410	415
Asp Ile Met Ile Ser Ile Val Gly Leu Leu Gly Cys Ile Phe Gly Thr			
	420	425	430

Tyr Gln Ala Leu Tyr Glu Leu Pro Gln Pro Ile Ser His Ser Met Ala
 435 440 445
 Asn Ser Thr Gly Val His Ala
 450 455

<210> 4938

<211> 162

<212> PRT

<213> Homo sapiens

<400> 561

Met Ser Ile Thr Arg Leu His Glu Gln Lys Leu Val Gln His Val Val
 1 5 10 15
 Ser Gln Asn Cys Asp Gly Leu His Leu Arg Ser Gly Leu Pro Arg Thr
 20 25 30
 Ala Ile Ser Glu Leu His Gly Asn Met Tyr Ile Glu Val Ser Ser Pro
 35 40 45
 Ala Gly Thr Gln Gly Leu His Gly Gln Ala Gly Pro Thr His Cys Ala
 50 55 60
 Leu Leu Pro Leu Gly Leu Tyr Leu Leu Arg Ser Gln Gln Gly Val Arg
 65 70 75 80
 Ala Gly Val Arg Cys Asp Gly Ala His Cys Pro Pro Gln Thr Pro Asp
 85 90 95
 Arg Pro Asp Leu Pro Gln Val Trp Asp Pro Ala Ala Gly His His Cys
 100 105 110
 Ala Leu Trp Gly Glu Gly Asp Val Gly Ala Ala Ser Glu Leu Gly Ser
 115 120 125
 Gly Asp Arg Gly Cys Gln Gln Ser Arg His His Pro Val Ser Arg Val
 130 135 140
 Gln Pro Glu Gly Ser Lys Glu Val Pro Thr Pro Leu Val His Asp Gln
 145 150 155 160
 Ala Pro

<210> 4939

<211> 567

<212> PRT

<213> Homo sapiens

<400> 562

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Met Asp Asp Lys Asp Ile Asp Lys Glu Leu Arg Gln Lys Leu Asn Phe
  1             5             10             15
Ser Tyr Cys Glu Glu Thr Glu Ile Glu Gly Gln Lys Lys Val Glu Glu
      20             25             30
Ser Arg Glu Ala Ser Ser Gln Thr Pro Glu Lys Gly Glu Val Gln Asp
      35             40             45
Ser Glu Ala Lys Gly Thr Pro Pro Trp Thr Pro Leu Ser Asn Val His
      50             55             60
Glu Leu Asp Thr Ser Ser Glu Lys Asp Lys Glu Ser Pro Asp Gln Ile
      65             70             75             80
Leu Arg Thr Pro Val Ser His Pro Leu Lys Cys Pro Glu Thr Pro Ala
      85             90             95
Gln Pro Asp Ser Arg Ser Lys Leu Leu Pro Ser Asp Ser Pro Ser Thr
      100            105            110
Pro Lys Thr Met Leu Ser Arg Leu Val Ile Ser Pro Thr Gly Lys Leu
      115            120            125
Pro Ser Arg Gly Pro Lys His Leu Lys Leu Thr Pro Ala Pro Leu Lys
      130            135            140
Asp Glu Met Thr Ser Leu Ala Leu Val Asn Ile Asn Pro Phe Thr Pro
      145            150            155            160
Glu Ser Tyr Lys Lys Leu Phe Leu Gln Ser Gly Gly Lys Arg Lys Ile
      165            170            175
Arg Gly Asp Leu Glu Glu Ala Gly Pro Glu Glu Gly Lys Gly Gly Leu
      180            185            190
Pro Ala Lys Arg Cys Val Leu Arg Glu Thr Asn Met Ala Ser Arg Tyr
      195            200            205
Glu Lys Glu Phe Leu Glu Val Glu Lys Ile Gly Val Gly Glu Phe Gly
      210            215            220
Thr Val Tyr Lys Cys Ile Lys Arg Leu Asp Gly Cys Val Tyr Ala Ile
      225            230            235            240

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Asn Ser Ala
255

Pro His Val
270

Ile Ile Gln

Ser Glu Asn

Asp Ile Leu
320

Ser Met Val
335

Lys Val Gln
350

Ala Asp Trp

Ile His Ala

Arg Phe Leu
400

Lys Ala Asp
415

Ala Glu Ser
430

Ile Asn Phe

Leu Leu Lys

Ala Ala Leu
480

Ile Glu Leu
495

Leu Glu Arg
510

Thr Thr His

Tyr Gly Asp Thr Gly Val Ser Gly Thr His Thr Gly Ser Arg Ser Thr
 530 535 540
 Lys Arg Leu Val Gly Gly Lys Ser Ala Arg Ser Ser Ser Phe Thr Ser
 545 550 555 560
 Gly Glu Arg Glu Pro Leu His
 565

<210> 4940

<211> 140

<212> PRT

<213> Homo sapiens

<400> 563

Met Asp Phe Ile Val Ala Ala Ser Asn Leu Arg Ala Glu Asn Tyr Asp
 1 5 10 15
 Ile Pro Ser Ala Asp Arg His Lys Ser Lys Leu Ile Ala Gly Lys Ile
 20 25 30
 Ile Pro Ala Ile Ala Thr Thr Thr Ala Ala Val Val Gly Leu Val Cys
 35 40 45
 Leu Glu Leu Tyr Lys Val Val Gln Gly His Arg Gln Leu Asp Ser Tyr
 50 55 60
 Lys Asn Gly Phe Leu Asn Leu Ala Leu Pro Phe Phe Gly Phe Ser Glu
 65 70 75 80
 Pro Leu Ala Ala Pro Arg His Gln Tyr Tyr Asn Gln Glu Trp Thr Leu
 85 90 95
 Trp Asp Arg Phe Glu Val Gln Gly Leu Gln Pro Asn Gly Glu Glu Met
 100 105 110
 Thr Leu Lys Gln Phe Leu Asp Tyr Phe Lys Val Arg Pro Leu Pro Tyr
 115 120 125
 Ser Val Thr Pro Pro Gln Gly Ala Arg Cys Thr Arg
 130 135 140

<210> 4941

<211> 477

<212> PRT

<213> Homo sapiens

<400> 564

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Met Ser Ala Ala Pro Gly Leu Leu His Gln Glu Leu Ser Cys Pro Leu
  1             5             10             15
Cys Leu Gln Leu Phe Asp Ala Pro Val Thr Ala Glu Cys Gly His Ser
      20             25             30
Phe Cys Arg Ala Cys Leu Gly Arg Val Ala Gly Glu Pro Ala Ala Asp
      35             40             45
Gly Thr Val Leu Cys Pro Cys Cys Gln Ala Pro Thr Arg Pro Gln Ala
      50             55             60
Leu Ser Thr Asn Leu Gln Leu Ala Arg Leu Val Glu Gly Leu Ala Gln
      65             70             75             80
Val Pro Gln Gly His Cys Glu Glu His Leu Asp Pro Leu Ser Ile Tyr
      85             90             95
Cys Glu Gln Asp Arg Ala Leu Val Cys Gly Val Cys Ala Ser Leu Gly
      100            105            110
Ser His Arg Gly His Arg Leu Leu Pro Ala Ala Glu Ala His Ala Arg
      115            120            125
Leu Lys Thr Gln Leu Pro Gln Gln Lys Leu Gln Leu Gln Glu Ala Cys
      130            135            140
Met Arg Lys Glu Lys Ser Val Ala Val Leu Glu His Gln Leu Val Glu
      145            150            155            160
Val Glu Glu Thr Val Arg Gln Phe Arg Gly Ala Val Gly Glu Gln Leu
      165            170            175
Gly Lys Met Arg Val Phe Leu Ala Ala Leu Glu Gly Ser Leu Asp Cys
      180            185            190
Glu Ala Glu Arg Val Arg Gly Glu Ala Gly Val Ala Leu Arg Arg Glu
      195            200            205
Leu Gly Ser Leu Asn Ser Tyr Leu Glu Gln Leu Arg Gln Met Glu Lys
      210            215            220
Val Leu Glu Glu Val Ala Asp Lys Pro Gln Thr Glu Phe Leu Met Lys
      225            230            235            240
Tyr Cys Leu Val Thr Ser Arg Leu Gln Lys Ile Leu Ala Glu Ser Pro
      245            250            255

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Pro Pro Ala Arg Leu Asp Ile Gln Leu Pro Ile Ile Ser Asp Asp Phe
 260 265 270
 Lys Phe Gln Val Trp Arg Lys Met Phe Arg Ala Leu Met Pro Ala Leu
 275 280 285
 Glu Glu Leu Thr Phe Asp Pro Ser Ser Ala His Pro Ser Leu Val Val
 290 295 300
 Ser Ser Ser Gly Arg Arg Val Glu Cys Ser Glu Gln Lys Ala Pro Pro
 305 310 315 320
 Ala Gly Glu Asp Pro Arg Gln Phe Asp Lys Ala Val Ala Val Val Ala
 325 330 335
 His Gln Gln Leu Ser Glu Gly Glu His Tyr Trp Glu Val Asp Val Gly
 340 345 350
 Asp Lys Pro Arg Trp Ala Leu Gly Val Ile Ala Ala Glu Ala Pro Arg
 355 360 365
 Arg Gly Arg Leu His Ala Val Pro Ser Gln Gly Leu Trp Leu Leu Gly
 370 375 380
 Leu Arg Glu Gly Lys Ile Leu Glu Ala His Val Glu Ala Lys Glu Pro
 385 390 395 400
 Arg Ala Leu Arg Ser Pro Glu Arg Arg Pro Thr Arg Ile Gly Leu Tyr
 405 410 415
 Leu Ser Phe Gly Asp Gly Val Leu Ser Phe Tyr Asp Ala Ser Asp Ala
 420 425 430
 Asp Ala Leu Val Pro Leu Phe Ala Phe His Glu Arg Leu Pro Arg Pro
 435 440 445
 Val Tyr Pro Phe Phe Asp Val Cys Trp His Asp Lys Gly Lys Asn Ala
 450 455 460
 Gln Pro Leu Leu Leu Val Gly Pro Glu Gly Ala Glu Ala
 465 470 475

<210> 4942

<211> 505

<212> PRT

<213> Homo sapiens

<400> 565

Met	Ala	Val	Ala	Leu	Asp	Ser	Gln	Ile	Asp	Ala	Pro	Leu	Glu	Val	Glu
1				5					10					15	
Gly	Cys	Leu	Ile	Met	Lys	Val	Glu	Lys	Asp	Pro	Glu	Trp	Ala	Ser	Glu
				20					25					30	
Pro	Ile	Leu	Glu	Gly	Ser	Asp	Ser	Ser	Glu	Thr	Phe	Arg	Lys	Cys	Phe
				35					40					45	
Arg	Gln	Phe	Cys	Tyr	Glu	Asp	Val	Thr	Gly	Pro	His	Glu	Ala	Phe	Ser
				50					55					60	
Lys	Leu	Trp	Glu	Leu	Cys	Cys	Arg	Trp	Leu	Lys	Pro	Glu	Met	Arg	Ser
65					70					75					80
Lys	Glu	Gln	Ile	Leu	Glu	Leu	Leu	Val	Ile	Glu	Gln	Phe	Leu	Thr	Ile
				85						90					95
Leu	Pro	Glu	Lys	Ile	Gln	Ala	Trp	Ala	Gln	Lys	Gln	Cys	Pro	Gln	Ser
				100						105				110	
Gly	Glu	Glu	Ala	Val	Ala	Leu	Val	Val	His	Leu	Glu	Lys	Glu	Thr	Gly
				115						120				125	
Arg	Leu	Arg	Gln	Gln	Val	Ser	Ser	Pro	Val	His	Arg	Glu	Lys	His	Ser
				130						135				140	
Pro	Leu	Gly	Ala	Ala	Trp	Glu	Val	Ala	Asp	Phe	Gln	Pro	Glu	Gln	Val
145					150					155					160
Glu	Thr	Gln	Pro	Arg	Ala	Val	Ser	Arg	Glu	Glu	Pro	Gly	Ser	Leu	His
				165						170				175	
Ser	Gly	His	Gln	Glu	Gln	Leu	Asn	Arg	Lys	Arg	Glu	Arg	Arg	Pro	Leu
				180						185				190	
Pro	Lys	Asn	Ala	Arg	Pro	Ser	Pro	Trp	Val	Pro	Ala	Leu	Ala	Asp	Glu
				195						200				205	
Trp	Asn	Thr	Leu	Asp	Gln	Glu	Val	Thr	Thr	Thr	Arg	Leu	Pro	Ala	Gly
				210						215				220	
Ser	Gln	Glu	Pro	Val	Lys	Asp	Val	His	Val	Ala	Arg	Gly	Phe	Ser	Tyr
225					230					235					240
Arg	Lys	Ser	Val	His	Gln	Ile	Pro	Ala	Gln	Arg	Asp	Leu	Tyr	Arg	Asp
				245						250				255	
Phe	Arg	Lys	Glu	Asn	Val	Gly	Asn	Val	Val	Ser	Leu	Gly	Ser	Ala	Val
				260						265				270	
Ser	Thr	Ser	Asn	Lys	Ile	Thr	Arg	Leu	Glu	Gln	Arg	Lys	Glu	Pro	Trp
				275						280				285	

Thr Leu Gly Leu His Ser Ser Asn Lys Arg Ser Ile Leu Arg Ser Asn
 290 295 300
 Tyr Val Lys Glu Lys Ser Val His Ala Ile Gln Val Pro Ala Arg Ser
 305 310 315 320
 Ala Gly Lys Thr Trp Arg Glu Gln Gln Gln Trp Gly Leu Glu Asp Glu
 325 330 335
 Lys Ile Ala Gly Val His Trp Ser Tyr Glu Glu Thr Lys Thr Phe Leu
 340 345 350
 Ala Ile Leu Lys Glu Ser Arg Phe Tyr Glu Thr Leu Gln Ala Cys Pro
 355 360 365
 Arg Asn Ser Gln Val Tyr Gly Ala Val Ala Glu Trp Leu Arg Glu Cys
 370 375 380
 Gly Phe Leu Arg Thr Pro Glu Gln Cys Arg Thr Lys Phe Lys Ser Leu
 385 390 395 400
 Gln Lys Ser Tyr Arg Lys Val Arg Asn Gly His Met Leu Glu Pro Cys
 405 410 415
 Ala Phe Phe Glu Asp Met Asp Ala Leu Leu Asn Pro Ala Ala Arg Ala
 420 425 430
 Pro Ser Thr Asp Lys Pro Lys Glu Met Ile Pro Val Pro Arg Leu Lys
 435 440 445
 Arg Ile Ala Ile Ser Ala Lys Glu His Ile Ser Leu Val Glu Glu Glu
 450 455 460
 Glu Ala Ala Glu Asp Ser Asp Asp Asp Glu Ile Gly Ile Glu Phe Ile
 465 470 475 480
 Arg Lys Ser Glu Ile His Gly Ala Pro Val Leu Phe Gln Asn Leu Ser
 485 490 495
 Gly Lys Asn Cys Ala Leu Phe Leu Trp
 500 505

<210> 4943

<211> 133

<212> PRT

<213> Homo sapiens

<400> 566

Met Pro Pro Leu Ala Arg Ser Pro Arg Ala Ser Ile Val Ala Leu Arg
 1 5 10 15
 Lys Met Ile Thr Ser Phe Leu Ala Leu Trp Trp His Val Cys Val Cys
 20 25 30
 Ile Cys Ile Tyr Thr His Ile Tyr Ile Asn Thr Gln Thr His Ile Tyr
 35 40 45
 Thr Asn Thr Arg Ile His Phe Arg Pro Gln Phe Leu Ala His Asn Ser
 50 55 60
 His Ser Pro Cys Tyr Thr Leu Leu Leu Gln His Trp Val Cys Gln Ala
 65 70 75 80
 Ser Gly Asp Asn His Ser Asn Leu Leu Pro Phe Leu Leu Pro Ala Gln
 85 90 95
 Asp Arg Thr Leu Ile Phe Pro Thr Phe Leu Met Val Gly His Lys Thr
 100 105 110
 His Ser Arg Asp Gly Pro Thr Pro Tyr Pro Ala Arg Arg Asn Ala Ala
 115 120 125
 Val Met Lys Leu Pro
 130

<210> 4944

<211> 502

<212> PRT

<213> Homo sapiens

<400> 567

Met Val Gln Tyr His Gly Ala Glu Ala Ala Gln Arg Phe Ile Leu Thr
 1 5 10 15
 Val Met Asn Met Val Tyr Asn Met Phe Gln His Gln Ser Leu Gly Ile
 20 25 30
 Lys Ile Asn Ile Gln Val Thr Lys Leu Val Leu Leu Arg Gln Arg Pro
 35 40 45
 Ala Lys Leu Ser Ile Gly His His Gly Glu Arg Ser Leu Glu Ser Phe
 50 55 60
 Cys His Trp Gln Asn Glu Glu Tyr Gly Gly Ala Arg Tyr Leu Gly Asn
 65 70 75 80

Asn Gln Val Pro Gly Gly Lys Asp Asp Pro Pro Leu Val Asp Ala Ala			
	85	90	95
Val Phe Val Thr Arg Thr Asp Phe Cys Val His Lys Asp Glu Pro Cys			
	100	105	110
Asp Thr Val Gly Ile Ala Tyr Leu Gly Gly Val Cys Ser Ala Lys Arg			
	115	120	125
Lys Cys Val Leu Ala Glu Asp Asn Gly Leu Asn Leu Ala Phe Thr Ile			
	130	135	140
Ala His Glu Leu Gly His Asn Leu Gly Met Asn His Asp Asp Asp His			
	145	150	155
Ser Ser Cys Ala Gly Arg Ser His Ile Met Ser Gly Glu Trp Val Lys			
	165	170	175
Gly Arg Asn Pro Ser Asp Leu Ser Trp Ser Ser Cys Ser Arg Asp Asp			
	180	185	190
Leu Glu Asn Phe Leu Lys Ser Lys Val Ser Thr Cys Leu Leu Val Thr			
	195	200	205
Asp Pro Arg Ser Gln His Thr Val Arg Leu Pro His Lys Leu Pro Gly			
	210	215	220
Met His Tyr Ser Ala Asn Glu Gln Cys Gln Ile Leu Phe Gly Met Asn			
	225	230	235
Ala Thr Phe Cys Arg Asn Met Glu His Leu Met Cys Ala Gly Leu Trp			
	245	250	255
Cys Leu Val Glu Gly Asp Thr Ser Cys Lys Thr Lys Leu Asp Pro Pro			
	260	265	270
Leu Asp Gly Thr Glu Cys Gly Ala Asp Lys Trp Cys Arg Ala Gly Glu			
	275	280	285
Cys Val Ser Lys Thr Pro Ile Pro Glu His Val Asp Gly Asp Trp Ser			
	290	295	300
Pro Trp Gly Ala Trp Ser Met Cys Ser Arg Thr Cys Gly Thr Gly Ala			
	305	310	315
Arg Phe Arg Gln Arg Lys Cys Asp Asn Pro Pro Pro Gly Pro Gly Gly			
	325	330	335
Thr His Cys Pro Gly Ala Ser Val Glu His Ala Val Cys Glu Asn Leu			
	340	345	350
Pro Cys Pro Lys Gly Leu Pro Ser Phe Arg Asp Gln Gln Cys Gln Ala			
	355	360	365

His Asp Arg Leu Ser Pro Lys Lys Lys Gly Leu Leu Thr Ala Val Val
 370 375 380
 Val Asp Asp Lys Pro Cys Glu Leu Tyr Cys Ser Pro Leu Gly Lys Glu
 385 390 395 400
 Ser Pro Leu Leu Val Ala Asp Arg Val Leu Asp Gly Thr Pro Cys Gly
 405 410 415
 Pro Tyr Glu Thr Asp Leu Cys Val His Gly Lys Cys Gln Lys Ile Gly
 420 425 430
 Cys Asp Gly Ile Ile Gly Ser Ala Ala Lys Glu Asp Arg Cys Gly Val
 435 440 445
 Cys Ser Gly Asp Gly Lys Thr Cys His Leu Ala Lys Gly Asp Phe Ser
 450 455 460
 His Ala Arg Gly Thr Gly Tyr Ile Glu Ala Ala Val Ile Pro Ala Gly
 465 470 475 480
 Ala Arg Arg Ile Arg Val Val Glu Asp Lys Pro Ala His Ser Phe Leu
 485 490 495
 Gly Lys Thr Gln Met Thr
 500

<210> 4945

<211> 356

<212> PRT

<213> Homo sapiens

<400> 568

Met Val Ile Lys Gln Met Leu Ile Arg Asp Pro Phe Pro Ser Leu Ser
 1 5 10 15
 Leu Ala Gln Ile Ala Met Asp Arg Met Lys Lys Ile Lys Arg Gln Leu
 20 25 30
 Ser Met Thr Leu Arg Gly Gly Arg Gly Ile Asp Lys Thr Asn Gly Ala
 35 40 45
 Pro Glu Gln Ile Gly Leu Asp Glu Ser Gly Gly Gly Gly Gly Ser Asp
 50 55 60
 Pro Gly Glu Ala Pro Thr Arg Ala Ala Pro Gly Glu Leu Arg Ser Ala
 65 70 75 80

Arg Gly Pro Leu Ser Ser Ala Pro Glu Ile Val His Glu Asp Leu Lys
 85 90 95
 Met Gly Ser Asp Gly Glu Ser Asp Gln Ala Ser Ala Thr Ser Ser Asp
 100 105 110
 Glu Val Gln Ser Pro Val Arg Val Arg Met Arg Asn His Pro Pro Arg
 115 120 125
 Lys Ile Ser Thr Glu Asp Ile Asn Lys Arg Leu Ser Leu Pro Ala Asp
 130 135 140
 Ile Arg Leu Pro Glu Gly Tyr Leu Glu Lys Leu Thr Leu Asn Ser Pro
 145 150 155 160
 Ile Phe Asp Lys Pro Leu Ser Arg Arg Leu Arg Arg Val Ser Leu Ser
 165 170 175
 Glu Ile Gly Phe Gly Lys Leu Glu Thr Tyr Ile Lys Leu Asp Lys Leu
 180 185 190
 Gly Glu Gly Thr Tyr Ala Thr Val Tyr Lys Gly Lys Ser Lys Leu Thr
 195 200 205
 Asp Asn Leu Val Ala Leu Lys Glu Ile Arg Leu Glu His Glu Glu Gly
 210 215 220
 Ala Pro Cys Thr Ala Ile Arg Glu Val Ser Leu Leu Lys Asp Leu Lys
 225 230 235 240
 His Ala Asn Ile Val Thr Leu His Asp Ile Ile His Thr Glu Lys Ser
 245 250 255
 Leu Thr Leu Val Phe Glu Tyr Leu Asp Lys Asp Leu Lys Gln Tyr Leu
 260 265 270
 Asp Asp Cys Gly Asn Ile Ile Asn Met His Asn Val Lys Val Gly Val
 275 280 285
 Gly Gln Glu Ala Gly Ala Gln Gly Gly Pro His Ser Pro Thr Pro Thr
 290 295 300
 His Lys Ser Pro Arg Asn Gly Leu Phe Pro Leu Ala Phe Phe Ala Arg
 305 310 315 320
 Ser Pro Trp Arg Ala Leu Gly Pro Cys Pro Leu Leu Cys Asp Lys Ala
 325 330 335
 Leu Gly Leu Val Ser Val Phe Gly Arg Gly Ala Val Pro Ala Gly Gly
 340 345 350
 Arg Ala Ser Gly
 355

<210> 4946

<211> 126

<212> PRT

<213> Homo sapiens

<400> 569

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Met Met Ile Thr Ala His Tyr Ser Leu Asp Phe Thr Gly Ser Gly Asp
  1             5             10             15
Phe Pro Thr Ser Ala Ser Arg Val Ala Gly Thr Thr Gly Thr His His
          20             25             30
His Thr Gln Leu Ile Phe Cys Ile Phe Ser Arg Gly Arg Val Leu Pro
      35             40             45
Cys Cys Pro Gly Trp Ser Arg Thr Pro Gly Leu Lys Gln Ser Ala His
      50             55             60
Leu Gly Leu Pro Lys Cys Trp Ile Thr Gly Met Ser Arg Cys Ala Gln
      65             70             75             80
Pro Lys Ile Ile Phe Ile Leu Phe Ile Gly Ser Ser Phe Ile Ala Leu
          85             90             95
Glu Ile Gln Ala Ala Arg Tyr Cys Asp Trp Cys Ile Trp Thr Tyr Leu
          100            105            110
Trp Ser Lys Thr Gly Thr His Gln Ile Val Ala Leu Ala Asn
          115            120            125

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<210> 4947

<211> 141

<212> PRT

<213> Homo sapiens

<400> 570

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Met Leu Leu Trp Thr Leu Gln Tyr Lys Cys Leu Thr Lys Ser Leu Leu
  1             5             10             15
Leu Ile Leu Trp Gly Ile Tyr Ile Lys Val Glu Leu Leu Asp His Leu

```

20	25	30
Val Val Leu His Phe Thr Phe Phe Arg Asp Cys His Ile Val Phe His		
35	40	45
Ser Asp Cys Thr Ile Leu Tyr Ser Leu Arg Gln Tyr Ala Arg Val Leu		
50	55	60
Ile Ser Pro Tyr Ser His Gln His Leu Phe Ser Val Leu Arg Ile Ile		
65	70	75
Ala Ile Leu Arg Gly Val Met Trp Tyr Leu Ile Glu Val Ser Ile Cys		
85	90	95
Ile Ser Leu Met Ile Ser Asp Val Glu Cys Phe Phe Met Tyr Phe Leu		
100	105	110
Ala Ile Cys Ile Ser Pro Leu Lys Lys Tyr Gln Tyr Gln Val Ile Cys		
115	120	125
Ser Cys Leu Ile Glu Leu Leu Cys Cys Gly Gly Phe Tyr		
130	135	140

<210> 4948

<211> 152

<212> PRT

<213> Homo sapiens

<400> 571

Met Gly Phe His Tyr Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser		
1	5	10
Gly Asp Pro Leu Ala Ser Ala Phe Gln Ser Ala Gly Ile Ile Gly Val		
20	25	30
Ser His Arg Thr Trp Gly Gly Tyr Cys Leu Lys Lys Lys Ser Pro Asp		
35	40	45
Ser Asp Pro Leu Ser Thr Trp Arg Thr Ser Thr Gly Arg Lys Gln Met		
50	55	60
Leu Gln Ile Phe Lys Tyr Pro Asp Gly Phe Gly Ser Gln Gly Glu Arg		
65	70	75
Asp Leu Thr Ser Val Tyr His Pro Thr Leu Ser Thr Lys Val Thr Ile		
85	90	95
Asn Thr Lys Ser Ile Ala Trp Ala Thr Gly Lys Lys Ala Phe Ile Cys		

100 105 110
 Ile Asn Val Cys Val Tyr Ile His Cys Phe Phe Phe Phe Lys Arg Leu
 115 120 125
 Gly Leu Pro Leu Ser Pro Arg Leu Glu His Ser Gly Thr Ile Ile Ala
 130 135 140
 His Cys Ser Leu Gln Arg Cys Gly
 145 150

<210> 4949

<211> 168

<212> PRT

<213> Homo sapiens

<400> 572

Met Tyr Pro Ser Asn Lys Lys Lys Lys Val Trp Arg Glu Glu Lys Glu
 1 5 10 15
 Arg Leu Leu Lys Met Thr Leu Glu Glu Arg Arg Lys Glu Tyr Leu Arg
 20 25 30
 Asp Tyr Ile Pro Leu Asn Ser Ile Leu Ser Trp Lys Glu Glu Met Lys
 35 40 45
 Gly Lys Gly Gln Asn Asp Glu Glu Asn Ile Gln Glu Thr Ser Gln Val
 50 55 60
 Lys Lys Ser Leu Thr Glu Lys Val Ser Leu Tyr Arg Gly Asp Ile Thr
 65 70 75 80
 Leu Leu Glu Val Asp Ala Ile Val Asn Ala Ala Asn Ala Ser Leu Leu
 85 90 95
 Gly Gly Gly Gly Val Asp Gly Cys Ile His Arg Ala Ala Gly Pro Cys
 100 105 110
 Leu Leu Ala Glu Cys Arg Asn Leu Asn Gly Cys Asp Thr Gly His Ala
 115 120 125
 Lys Ile Thr Cys Gly Tyr Asp Leu Pro Ala Lys Tyr Val Ile His Thr
 130 135 140
 Val Gly Pro Ile Ala Arg Ala Ile Leu Met Val Pro Thr Arg Lys Thr
 145 150 155 160
 Leu Gln Ile Ala Ile Asn His Leu

165

<210> 4950

<211> 151

<212> PRT

<213> Homo sapiens

<400> 573

Met Gly Leu Gly Gly Val Ser Arg Glu Ala Gly Leu Leu Leu Leu Ser
 1 5 10 15
 Ser Pro Cys Pro Asp Pro Ser Val Cys Leu Ser Asp Lys Pro Val Pro
 20 25 30
 Glu Glu Ser Glu Gly Pro Gly Ser Pro Pro Pro Tyr Lys Met Ile Gln
 35 40 45
 Thr Ile Gly Leu Ser Val Gly Ala Ala Val Ala Tyr Ile Ile Ala Val
 50 55 60
 Leu Gly Leu Met Phe Tyr Cys Lys Lys Arg Cys Lys Ala Lys Arg Leu
 65 70 75 80
 Gln Lys Gln Pro Glu Gly Glu Glu Pro Glu Met Glu Cys Leu Asn Gly
 85 90 95
 Gly Pro Leu Gln Asn Gly Gln Pro Ser Ala Glu Ile Gln Glu Glu Val
 100 105 110
 Ala Leu Thr Ser Leu Gly Ser Gly Pro Ala Ala Thr Asn Lys Arg His
 115 120 125
 Ser Thr Ser Asp Lys Met His Phe Pro Arg Ser Ser Leu Gln Pro Ile
 130 135 140
 Thr Thr Leu Gly Met Leu Pro
 145 150

<210> 4951

<211> 182

<212> PRT

<213> Homo sapiens

<400> 574

Met Leu Pro Thr Ala Ala Gly Phe Ser Ile Trp Gly Gln Val Gly Ala
 1 5 10 15
 Ala Arg Glu Ala Pro Arg Cys Gln Thr Lys Ile Ser Ser Cys Ser Cys
 20 25 30
 Pro Thr Ser Ser Val Ser Ala Ala His Gly Pro Gly Pro Asn Glu Arg
 35 40 45
 Ala Arg Gly Leu Gly Gly Leu Pro Asp Pro Ala Leu Ser Pro Arg Val
 50 55 60
 Pro Phe Gln Gly Tyr Ala Arg Ile Val Phe Ala Ile Ile Ser Phe Tyr
 65 70 75 80
 Phe Met Pro Cys Cys Pro Leu Thr Ala Ser Ser Phe Tyr Leu Leu Ser
 85 90 95
 Gly Leu Leu Asp Ala Phe Asp Gly His Ala Ala Arg Ala Leu Asn Gln
 100 105 110
 Gly Thr Arg Phe Gly Ala Met Leu Asp Met Leu Thr Asp Arg Cys Ser
 115 120 125
 Thr Met Cys Leu Leu Val Asn Leu Ala Leu Leu Tyr Pro Gly Ala Thr
 130 135 140
 Leu Phe Phe Gln Ile Ser Met Ser Leu Asp Val Ala Ser His Trp Leu
 145 150 155 160
 His Leu His Arg Ser Ala Ala Ile Leu Gly Ala Trp Ala Thr Trp Arg
 165 170 175
 His Tyr Ser Gly Val Gly
 180

<210> 4952

<211> 258

<212> PRT

<213> Homo sapiens

<400> 575

Met Gly Thr Leu Thr Phe His Leu Lys Ser Ser Phe Pro Gln Val Leu
 1 5 10 15
 Arg His Val Asn Gly Gln Asp Gln Ile Val Pro Gly Leu Tyr Ala Cys

	20		25		30
Gly	Glu	Ala	Ala	Cys	Ala
		Ser	Val	His	Gly
				Ala	Asn
				Arg	Leu
					Gly
					Ala
	35		40		45
Asn	Ser	Leu	Leu	Asp	Leu
		Val	Ala	Phe	Gly
				Arg	Ala
				Cys	Ala
				Pro	Ser
	50		55		60
Ile	Glu	Glu	Ser	Cys	Arg
		Pro	Gly	Asp	Lys
				Val	Pro
				Pro	Ile
					Lys
					Pro
	65		70		75
					80
Asn	Ala	Gly	Glu	Glu	Ser
		Val	Met	Asn	Leu
				Asp	Lys
				Leu	Arg
				Phe	Ala
		85		90	
				95	
Asp	Gly	Ser	Ile	Arg	Thr
		Ser	Glu	Leu	Arg
			Leu	Ser	Met
				Gln	Lys
				Ser	
	100		105		110
Met	Gln	Asn	His	Ala	Ala
		Val	Phe	Arg	Val
			Gly	Ser	Val
				Leu	Gln
				Glu	
	115		120		125
Gly	Cys	Gly	Lys	Ile	Ser
		Lys	Leu	Tyr	Gly
				Asp	Leu
				Lys	His
				Leu	Lys
	130		135		140
Thr	Phe	Asp	Arg	Gly	Met
		Val	Trp	Asn	Thr
			Asp	Leu	Val
				Glu	Thr
				Leu	
	145		150		155
					160
Glu	Leu	Gln	Asn	Leu	Met
		Leu	Cys	Ala	Leu
			Gln	Thr	Ile
				Tyr	Gly
				Ala	
		165		170	
				175	
Glu	Ala	Arg	Lys	Glu	Ser
		Arg	Gly	Ala	His
			Ala	Arg	Glu
				Asp	Tyr
				Lys	
	180		185		190
Val	Arg	Ile	Asp	Glu	Tyr
		Asp	Tyr	Ser	Lys
			Pro	Ile	Gln
				Gly	Gln
				Gln	
	195		200		205
Lys	Lys	Pro	Phe	Glu	Glu
		His	Trp	Arg	Lys
			His	Thr	Leu
				Ser	Tyr
				Val	
	210		215		220
Asp	Val	Gly	Thr	Gly	Lys
		Val	Thr	Leu	Glu
			Tyr	Arg	Pro
				Val	Ile
				Asp	
	225		230		235
					240
Lys	Thr	Leu	Asn	Glu	Ala
		Asp	Cys	Ala	Thr
			Val	Pro	Pro
				Ala	Ile
				Arg	
		245		250	
				255	
Ser	Tyr				

<210> 4953

<211> 149

<212> PRT

<213> Homo sapiens

<400> 576

```

Met Tyr Met Glu Pro Ser Ala Arg Ser Ala Gly Tyr Ser Pro Gln Gln
 1             5             10             15
Lys Arg Leu Ser Lys Thr Arg Ile Pro Arg Leu Gln Ser Leu Thr Asp
      20             25             30
Gln Ala Ala Leu Trp Gly Thr Thr Cys Asp Gln Val Asn Ala Lys Gln
      35             40             45
Gly Pro Lys Pro Ser Pro Gly His Arg Leu Arg Arg Asn Leu Pro Gly
      50             55             60
Glu Lys Trp Glu Ile Asp Phe Thr Lys Val Lys Pro His Gln Ala Gly
      65             70             75             80
Tyr Lys Tyr Leu Leu Val Leu Val Asp Thr Phe Ser Gly Trp Thr Glu
      85             90             95
Ala Phe Ala Thr Lys Asn Glu Thr Ala Asn Leu Val Val Lys Phe Leu
      100            105            110
Leu Asn Glu Ile Ile Pro Arg Tyr Gly Leu Pro Ala Ala Ile Gly Ser
      115            120            125
Asp Asn Gly Pro Ala Phe Thr Ser Ser Ile Val Leu Ser Val Ser Lys
      130            135            140
Ala Leu Asn Ile Gln
145

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<210> 4954

<211> 602

<212> PRT

<213> Homo sapiens

<400> 577

```

Met Glu Ser Gln Ala Thr Ser Ala Ser Ile Asn Asn Ser Asn Pro Ser
 1             5             10             15
Thr Ser Glu Gln Ala Ser Asp Thr Ala Ser Ala Val Thr Ser Ser Gln
      20             25             30
Pro Ser Thr Val Ser Glu Thr Ser Ala Thr Leu Thr Ser Asn Ser Thr

```

35	40	45
Thr Gly Thr Ser Ile Gly Asp Asp Ser Arg Arg Thr Thr Ser Ser Ala		
50	55	60
Val Thr Glu Thr Gly Pro Pro Ala Met Pro Arg Leu Pro Ser Cys Cys		
65	70	75
Pro Gln His Ser Pro Cys Gly Gly Ser Ser Gln Asn His His Ala Leu		
85	90	95
Gly His Pro His Thr Ser Cys Phe Gln Gln His Gly His His Phe Gln		
100	105	110
His His His His His His His Thr Pro His Pro Ala Val Pro Val Ser		
115	120	125
Pro Ser Phe Ser Asp Pro Ala Cys Pro Val Glu Arg Pro Pro Gln Val		
130	135	140
Gln Ala Pro Cys Gly Ala Asn Ser Ser Ser Gly Thr Ser Tyr His Glu		
145	150	155
Gln Gln Ala Leu Pro Val Asp Leu Ser Asn Ser Gly Ile Arg Ser His		
165	170	175
Gly Ser Gly Ser Phe His Gly Ala Ser Ala Phe Asp Pro Cys Cys Pro		
180	185	190
Val Ser Ser Ser Arg Ala Ala Ile Phe Gly His Gln Ala Ala Ala Ala		
195	200	205
Ala Pro Ser Gln Pro Leu Ser Ser Ile Asp Gly Tyr Gly Ser Ser Met		
210	215	220
Val Ala Gln Pro Gln Pro Gln Pro Pro Pro Gln Pro Ser Leu Ser Ser		
225	230	235
Cys Arg His Tyr Met Pro Pro Pro Tyr Ala Ser Leu Thr Arg Pro Leu		
245	250	255
His His Gln Ala Ser Ala Cys Pro His Ser His Gly Asn Pro Pro Pro		
260	265	270
Gln Thr Gln Pro Pro Pro Gln Val Asp Tyr Val Ile Pro His Pro Val		
275	280	285
His Ala Phe His Ser Gln Ile Ser Ser His Ala Thr Ser His Pro Val		
290	295	300
Ala Pro Pro Pro Pro Thr His Leu Ala Ser Thr Ala Ala Pro Ile Pro		
305	310	315
Gln His Leu Pro Pro Thr His Gln Pro Ile Ser His His Ile Pro Ala		

325	330	335
Thr Ala Pro Pro Ala Gln Arg Leu His Pro His Glu Val Met Gln Arg		
340	345	350
Met Glu Val Gln Arg Arg Arg Met Met Gln His Pro Thr Gly Leu Phe		
355	360	365
Val Phe Cys Val Ser Arg Arg Ala His Glu Arg Pro Pro Pro His Pro		
370	375	380
His Arg Met His Pro Asn Tyr Gly His Gly His His Ile His Val Pro		
385	390	395
Gln Thr Met Ser Ser His Pro Arg Gln Ala Pro Glu Arg Ser Ala Trp		
405	410	415
Glu Leu Gly Ile Glu Ala Gly Val Thr Ala Ala Thr Tyr Thr Pro Gly		
420	425	430
Ala Leu His Pro His Leu Ala His Tyr His Ala Pro Pro Arg Leu His		
435	440	445
His Leu Gln Leu Gly Ala Leu Pro Leu Met Val Pro Asp Met Ala Gly		
450	455	460
Tyr Pro His Ile Arg Tyr Ile Ser Ser Gly Leu Asp Gly Thr Ser Phe		
465	470	475
Arg Gly Pro Phe Arg Gly Asn Phe Glu Glu Leu Ile His Leu Glu Glu		
485	490	495
Arg Leu Gly Asn Val Asn Arg Gly Ala Ser Gln Gly Thr Ile Glu Arg		
500	505	510
Cys Thr Tyr Pro His Lys Tyr Lys Lys Val Thr Thr Asp Trp Phe Ser		
515	520	525
Gln Arg Lys Leu His Cys Lys Gln Asp Gly Glu Glu Gly Thr Glu Glu		
530	535	540
Asp Thr Glu Glu Lys Cys Thr Ile Cys Leu Ser Ile Leu Glu Glu Gly		
545	550	555
Glu Asp Val Arg Arg Leu Pro Cys Met His Leu Phe His Gln Val Cys		
565	570	575
Val Asp Gln Trp Leu Ile Thr Asn Lys Lys Cys Pro Ile Cys Arg Val		
580	585	590
Asp Ile Glu Ala Gln Leu Pro Ser Glu Ser		
595	600	

<210> 4955

<211> 116

<212> PRT

<213> Homo sapiens

<400> 578

```

Met Val Ser Gly Met Gly Met Gly Asn Arg Asp Thr Asn Pro Asn Gly
  1             5             10             15
Lys Pro Leu Ala Lys Gln Pro Pro Glu Phe Val Leu Ile Val Tyr Ser
      20             25             30
Gln Ser Leu Ala Thr Ala His Thr Leu Phe Phe Ser Tyr Lys Gln Lys
      35             40             45
Glu Leu Ser Leu Ser Ala Met Asn Pro Ala Ile Pro Arg Lys Lys Ala
      50             55             60
Asn Ala Leu Ala Ser Ser Pro Val Arg Ala Thr His Ser Ile Ser Thr
      65             70             75             80
Phe Cys Met Leu Lys Leu Cys His Arg Arg Arg Ala Ser Ala His Asp
      85             90             95
Gln Phe Phe Phe Trp Ser Ile Gly Ser Phe Cys Leu Arg Ile Phe Val
      100             105             110
Cys Val Tyr Leu
      115

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<210> 4956

<211> 376

<212> PRT

<213> Homo sapiens

<400> 579

```

Met Ala Asp Ser Arg Arg Val Ile Ile Ala Ser Trp Tyr Arg Thr Phe
  1             5             10             15
Met Gly Ile Val Asn Leu Phe Gly Leu Glu Thr Lys Thr Cys Trp Asn
      20             25             30
Val Thr Arg Ile Glu Pro Leu Asn Glu Val Gln Ser Cys Glu Gly Leu

```

35	40	45
Arg Asp Pro Ala Cys Phe Tyr Val Gly Val Ile Phe Ile Leu Asn Gly		
50	55	60
Leu Met Met Gly Leu Phe Phe Ile Tyr Gly Thr Tyr Leu Ser Gly Thr		
65	70	75
Glu Leu Gly Gly Leu Ile Thr Val Leu Cys Phe Phe Phe Asn His Gly		
85	90	95
Glu Ala Thr Cys Val Met Trp Thr Pro Pro Leu Arg Glu Ser Phe Ser		
100	105	110
Tyr Pro Phe Leu Val Leu Gln Met Tyr Val Leu Thr Leu Ile Leu Arg		
115	120	125
Thr Ser Ser Asn Asp Arg Arg Pro Phe Ile Ala Leu Cys Leu Ser Asn		
130	135	140
Val Ala Phe Met Leu Pro Trp Gln Phe Ala Gln Phe Ile Leu Phe Thr		
145	150	155
Gln Ile Ala Ser Leu Phe Pro Met Tyr Val Val Gly Tyr Ile Glu Pro		
165	170	175
Ser Lys Phe Gln Lys Ile Ile Tyr Met Asn Met Ile Ser Val Thr Leu		
180	185	190
Ser Phe Ile Leu Met Phe Gly Asn Ser Met Tyr Leu Ser Ser Tyr Tyr		
195	200	205
Ser Ser Ser Leu Leu Met Thr Trp Ala Ile Ile Leu Lys Arg Asn Glu		
210	215	220
Ile Gln Lys Leu Gly Val Ser Lys Leu Asn Cys Trp Leu Ile Gln Gly		
225	230	235
Ser Ala Trp Trp Cys Gly Thr Ile Ile Leu Lys Phe Leu Thr Ser Lys		
245	250	255
Ile Leu Gly Val Ser Asp His Ile Cys Leu Ser Asp Leu Ile Ala Ala		
260	265	270
Gly Thr Leu Arg Tyr Thr Asp Phe Asp Thr Leu Lys Tyr Thr Cys Ser		
275	280	285
Pro Glu Phe Asp Phe Met Glu Lys Ala Thr Leu Leu Ile Tyr Thr Lys		
290	295	300
Thr Leu Leu Leu Pro Val Val Met Val Ile Thr Cys Phe Ile Phe Lys		
305	310	315
Lys Thr Val Gly Asp Ile Ser Arg Val Leu Ala Thr Asn Val Tyr Leu		

	325		330		335										
Arg	Cys	Cys	Leu	Cys	Arg	Cys	His	Ala	Tyr	Asn	Gly	Lys	Cys	Gln	Ala
	340		345		350										
Val	Tyr	Thr	Ser	Ser	His	Cys	Glu	Ser	Ser	Thr	Leu	Arg	Arg	Cys	Arg
	355		360		365										
Leu	Glu	Ala	Trp	Leu	Gln	His	Ala								
	370		375												

<210> 4957

<211> 109

<212> PRT

<213> Homo sapiens

<400> 580

Met	Tyr	Pro	Ala	Leu	Leu	Val	Pro	Ser	Ser	Ser	Pro	Ser	Ser	Val	Phe
1				5						10				15	
Gly	Val	Pro	Glu	Thr	Gly	Phe	Ser	Gln	Trp	Pro	Gly	Pro	Gln	Gly	Asn
			20					25					30		
Cys	Arg	Val	Ile	Gln	Ser	Gly	Ser	Ala	Ser	Leu	Gln	Gly	Pro	Leu	Pro
		35						40					45		
Gly	Arg	Ala	Ser	Trp	His	Pro	Ala	Ile	Gly	Gly	Pro	Asp	Thr	Pro	Ala
		50						55					60		
Arg	Asp	Pro	Ala	Thr	Gln	Glu	Val	Pro	Thr	Pro	Ser	Gln	Ser	Asp	Pro
	65					70				75				80	
Gly	Pro	Arg	Ala	Asp	Arg	Ser	Pro	Pro	Leu	Lys	Arg	Leu	Leu	Pro	Leu
				85					90					95	
Tyr	Pro	Thr	Pro	Arg	Asp	Ser	Phe	His	Ser	Gly	Ile	Ser			
			100						105						

<210> 4958

<211> 363

<212> PRT

<213> Homo sapiens

<400> 581

Met Pro Val Arg Thr Leu Phe Pro Glu Ser Trp Leu Trp Arg Lys Phe
 1 5 10 15
 Thr Leu Pro Lys Ser Lys Ser Gly Ile Ser His Tyr Pro Ile Ser Val
 20 25 30
 Lys Val Pro Asp Ser Ile Thr Thr Trp Gln Phe Val Val Val Ser Leu
 35 40 45
 Lys Ala Gly Gln Gly Leu Cys Val Ser Asp Pro Phe Glu Leu Thr Val
 50 55 60
 Met Lys Ser Phe Phe Val Asp Leu Lys Leu Pro Ser Ser Val Ile Arg
 65 70 75 80
 Asn Glu Gln Val Gln Ile Gln Ala Met Leu Tyr Asn Phe Arg Asp Arg
 85 90 95
 Gln Ala Lys Val Arg Val Glu Phe Pro His Lys Glu Thr Leu Cys Ser
 100 105 110
 Ala Ser Lys Pro Gly Ala Pro Ser His Gln Ala Gly Val Gln Ile Gln
 115 120 125
 Gln Thr Ser Tyr Ser Ile Val Leu Glu Pro Gln Gly Gln Thr Gln Thr
 130 135 140
 Lys Leu Val Pro Arg Gln Glu Phe Leu Asn Met Val Pro Asp Thr Glu
 145 150 155 160
 Ala Glu Val Phe Ile Ser Val Gln Gly Tyr Thr Gln Met Leu Thr His
 165 170 175
 Arg Ser Ser Asp Gly Thr Tyr His Thr Ser Lys Gly Asn Pro Gly Ser
 180 185 190
 Thr Trp Leu Thr Ser Tyr Val Phe Arg Val Phe Ala Leu Ala Tyr Ser
 195 200 205
 Met Met Thr Thr Gln Val Leu Ser Leu Ser Ser Leu Cys Asp Met Ala
 210 215 220
 Asn Trp Ile Ile Ile Asp Arg Gln Ala Glu Asp Gly His Phe Leu Glu
 225 230 235 240
 Lys Gly Pro Val Val Met Thr Ser Met Gln Asp Gly Tyr Gln Gly Ser
 245 250 255
 Glu Glu Asp Val Ser Leu Thr Ala Leu Val Leu Ile Ala Leu Asn Glu
 260 265 270

Gly	Lys	Glu	Leu	Cys	Arg	Gln	Lys	Asn	Leu	Met	Ala	Ser	Ile	Glu	Arg	
275				280				285								
Ala	Arg	Gly	Phe	Leu	Glu	Arg	Lys	Leu	Pro	Asp	Ile	Gln	Thr	Thr	Phe	
290				295				300								
Ala	Val	Ala	Ile	Ala	Ser	Tyr	Ala	Leu	Ala	Leu	Ala	Asn	Ser	Ser	Gln	
305				310				315				320				
Ala	Asn	Asp	Cys	Leu	Asp	Ser	Phe	Ala	Ser	Pro	Ser	Gly	Cys	Gly	Met	
325				330				335								
Leu	Leu	Asn	Gln	Pro	Gln	Ser	Trp	Ser	Gly	Glu	Gly	Val	Ile	Ser	Asn	
340				345				350								
Pro	Ala	Met	Cys	Tyr	Ser	Ser	Leu	Ser	Val	Ser						
355				360												

<210> 4959

<211> 359

<212> PRT

<213> Homo sapiens

<400> 582

Met	Pro	Pro	Thr	Ser	Ser	Thr	Pro	Ser	Leu	Ser	Arg	Pro	Gly	Leu	Gly
1				5					10					15	
Gln	Ala	Gly	Lys	Pro	Asp	Thr	Gly	Ser	His	Pro	Pro	Pro	Thr	Ile	Ser
			20					25					30		
Thr	Ser	Ile	Phe	Leu	Ser	Cys	Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Pro
		35					40					45			
Arg	Thr	Thr	Gly	Pro	Ser	His	Ser	Tyr	Gln	Ser	Ile	Ser	His	Pro	Arg
	50					55					60				
Ser	Cys	Arg	Asp	Val	Pro	Asp	Asp	Ile	Gln	Pro	Ile	Thr	Ser	Leu	Pro
65				70					75					80	
Gly	Val	Ala	Arg	Tyr	Gly	Val	Lys	Arg	Leu	Glu	Glu	Met	Leu	Arg	Pro
			85						90					95	
Leu	Val	Glu	Glu	Gly	Leu	Arg	Cys	Val	Leu	Ile	Phe	Gly	Val	Pro	Ser
		100						105					110		
Arg	Val	Pro	Lys	Asp	Glu	Arg	Gly	Ser	Ala	Ala	Asp	Ser	Glu	Glu	Ser
	115					120						125			

Pro Ala Ile Glu Ala Ile His Leu Leu Arg Lys Thr Phe Pro Asn Leu
 130 135 140
 Leu Val Ala Cys Asp Val Cys Leu Cys Pro Tyr Thr Ser His Gly His
 145 150 155 160
 Cys Gly Leu Leu Ser Glu Asn Gly Ala Phe Arg Ala Glu Glu Ser Arg
 165 170 175
 Gln Arg Leu Ala Glu Val Ala Leu Ala Tyr Ala Lys Ala Gly Cys Gln
 180 185 190
 Val Val Ala Pro Ser Asp Met Met Asp Gly Arg Val Glu Ala Ile Lys
 195 200 205
 Glu Ala Leu Met Ala His Gly Leu Gly Asn Arg Val Ser Val Met Ser
 210 215 220
 Tyr Ser Ala Lys Phe Ala Ser Cys Phe Tyr Gly Pro Phe Arg Asp Ala
 225 230 235 240
 Ala Lys Ser Ser Pro Ala Phe Gly Asp Arg Arg Cys Tyr Gln Leu Pro
 245 250 255
 Pro Gly Ala Arg Gly Leu Ala Leu Arg Ala Val Asp Arg Asp Val Arg
 260 265 270
 Glu Gly Ala Asp Met Leu Met Val Lys Pro Gly Met Leu Tyr Leu Asp
 275 280 285
 Ile Val Arg Glu Val Lys Asp Lys His Pro Asp Leu Pro Leu Ala Val
 290 295 300
 Tyr His Val Ser Gly Glu Phe Ala Met Leu Trp His Gly Ala Gln Ala
 305 310 315 320
 Gly Ala Phe Asp Leu Lys Ala Ala Val Leu Glu Ala Met Thr Ala Phe
 325 330 335
 Arg Arg Ala Gly Ala Asp Ile Ile Ile Thr Tyr Tyr Thr Pro Gln Leu
 340 345 350
 Leu Gln Trp Leu Lys Glu Glu
 355

<210> 4960

<211> 508

<212> PRT

<213> Homo sapiens

<400> 583

Met Met Trp Gly Gly Gly Leu Asp Leu Cys Pro Met Pro Gly Gln Leu
 1 5 10 15
 Lys Phe Pro Pro Cys Leu Ser Arg Cys Leu Leu Trp Glu Pro Pro Ser
 20 25 30
 Leu Tyr Leu Thr Gln Pro Thr Ser Ser Leu Ala Glu Pro Gln Ala Leu
 35 40 45
 Ile Cys Met Thr Ser Ser Ser Ser Gly Leu Phe Ile Gln Asp Asp Asn
 50 55 60
 Met Glu Lys Leu Glu Glu Ile Ile Glu Lys Tyr Pro Arg Ala Phe Pro
 65 70 75 80
 Phe Trp Ile Gly Pro Phe Gln Ala Phe Phe Cys Ile Tyr Asp Pro Asp
 85 90 95
 Tyr Ala Lys Thr Leu Leu Ser Arg Thr Asp Pro Lys Ser Gln Tyr Leu
 100 105 110
 Gln Lys Phe Ser Pro Pro Leu Leu Gly Lys Gly Leu Ala Ala Leu Asp
 115 120 125
 Gly Pro Lys Trp Phe Gln His Arg Arg Leu Leu Thr Pro Gly Phe His
 130 135 140
 Phe Asn Ile Leu Lys Ala Tyr Ile Glu Val Met Ala His Ser Val Lys
 145 150 155 160
 Met Met Leu Asp Lys Trp Glu Lys Ile Cys Ser Thr Gln Asp Thr Ser
 165 170 175
 Val Glu Val Tyr Glu His Ile Asn Ser Met Ser Leu Asp Ile Val Met
 180 185 190
 Lys Cys Ala Phe Ser Lys Glu Thr Asn Cys Gln Thr Asn Ser Thr His
 195 200 205
 Asp Pro Tyr Ala Lys Ala Ile Phe Glu Leu Ser Lys Ile Ile Phe His
 210 215 220
 Arg Leu Tyr Ser Leu Leu Tyr His Ser Asp Ile Ile Phe Lys Leu Ser
 225 230 235 240
 Pro Gln Gly Tyr Arg Phe Gln Lys Leu Ser Arg Val Leu Asn Gln Tyr
 245 250 255
 Thr Asp Thr Ile Ile Gln Glu Arg Lys Lys Ser Leu Gln Ala Gly Val
 260 265 270

Lys Gln Asp Asn Thr Pro Lys Arg Lys Tyr Gln Asp Phe Leu Asp Ile
 275 280 285
 Val Leu Ser Ala Lys Asp Glu Ser Gly Ser Ser Phe Ser Asp Ile Asp
 290 295 300
 Val His Ser Glu Val Ser Thr Phe Leu Leu Ala Gly His Asp Thr Leu
 305 310 315 320
 Ala Ala Ser Ile Ser Trp Ile Leu Tyr Cys Leu Ala Leu Asn Pro Glu
 325 330 335
 His Gln Glu Arg Cys Arg Glu Glu Val Arg Gly Ile Leu Gly Asp Gly
 340 345 350
 Ser Ser Ile Thr Trp Asp Gln Leu Gly Glu Met Ser Tyr Thr Thr Met
 355 360 365
 Cys Ile Lys Glu Thr Cys Arg Leu Ile Pro Ala Val Pro Ser Ile Ser
 370 375 380
 Arg Asp Leu Ser Lys Pro Leu Thr Phe Pro Asp Gly Cys Thr Leu Pro
 385 390 395 400
 Ala Gly Ile Thr Val Val Leu Ser Ile Trp Gly Leu His His Asn Pro
 405 410 415
 Ala Val Trp Lys Asn Pro Lys Val Phe Asp Pro Leu Arg Phe Ser Gln
 420 425 430
 Glu Asn Ser Asp Gln Arg His Pro Tyr Ala Tyr Leu Pro Phe Ser Ala
 435 440 445
 Gly Ser Arg Asn Cys Ile Gly Gln Glu Phe Ala Met Ile Glu Leu Lys
 450 455 460
 Val Thr Ile Ala Leu Ile Leu Leu His Phe Arg Val Thr Pro Asp Pro
 465 470 475 480
 Thr Arg Pro Leu Thr Phe Pro Asn His Phe Ile Leu Lys Pro Lys Asn
 485 490 495
 Gly Met Tyr Leu His Leu Lys Lys Leu Ser Glu Cys
 500 505

<210> 4961

<211> 1264

<212> PRT

<213> Homo sapiens

<400> 584

Met Cys Lys Lys Leu Thr Lys Leu Ala Lys Glu Asn Asp Ser Met Lys
 1 5 10 15
 Glu Glu Leu Leu Lys Tyr Arg Ser Leu Tyr Gly Asp Leu Asp Ser Ala
 20 25 30
 Leu Ser Ala Glu Glu Leu Ala Asp Ala Pro His Ser Arg Glu Thr Glu
 35 40 45
 Leu Lys Val His Leu Lys Leu Val Glu Glu Glu Ala Asn Leu Leu Ser
 50 55 60
 Arg Arg Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Arg Ala Glu
 65 70 75 80
 Met Asp Asp Met Lys Asp His Gly Gly Gly Cys Gly Gly Pro Glu Ala
 85 90 95
 Arg Leu Ala Phe Ser Ala Leu Gly Gly Gly Glu Cys Gly Glu Ser Leu
 100 105 110
 Ala Glu Leu Arg Arg His Leu Gln Phe Val Glu Glu Glu Ala Glu Leu
 115 120 125
 Leu Arg Arg Ser Ser Ala Glu Leu Glu Asp Gln Asn Lys Leu Leu Leu
 130 135 140
 Asn Glu Leu Ala Lys Phe Arg Ser Glu His Glu Leu Asp Val Ala Leu
 145 150 155 160
 Ser Glu Asp Ser Cys Ser Val Leu Ser Glu Pro Ser Gln Glu Glu Leu
 165 170 175
 Ala Ala Ala Lys Leu Gln Ile Gly Glu Leu Ser Gly Lys Val Lys Lys
 180 185 190
 Leu Gln Tyr Glu Asn Arg Val Leu Leu Ser Asn Leu Gln Arg Cys Asp
 195 200 205
 Leu Ala Ser Cys Gln Ser Thr Arg Pro Met Leu Glu Thr Asp Ala Glu
 210 215 220
 Ala Gly Asp Ser Ala Gln Cys Val Pro Ala Pro Leu Gly Glu Thr His
 225 230 235 240
 Glu Ser His Ala Val Arg Leu Cys Arg Ala Arg Glu Ala Glu Val Leu
 245 250 255
 Pro Gly Leu Arg Glu Gln Ala Ala Leu Val Ser Lys Ala Ile Asp Val
 260 265 270

Leu Val Ala Asp Ala Asn Gly Phe Thr Ala Gly Leu Arg Leu Cys Leu
 275 280 285
 Asp Asn Glu Cys Ala Asp Phe Arg Leu His Glu Ala Pro Asp Asn Ser
 290 295 300
 Glu Gly Pro Arg Asp Thr Lys Leu Ile His Ala Ile Leu Val Arg Leu
 305 310 315 320
 Ser Val Leu Gln Gln Glu Leu Asn Ala Phe Thr Arg Lys Ala Asp Ala
 325 330 335
 Val Leu Gly Cys Ser Val Lys Glu Gln Gln Glu Ser Phe Ser Ser Leu
 340 345 350
 Pro Pro Leu Gly Ser Gln Gly Leu Ser Lys Glu Ile Leu Leu Ala Lys
 355 360 365
 Asp Leu Gly Ser Asp Phe Gln Pro Pro Asp Phe Arg Asp Leu Pro Glu
 370 375 380
 Trp Glu Pro Arg Ile Arg Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser
 385 390 395 400
 Lys Pro Asp Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn
 405 410 415
 Asp Ser Tyr Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu
 420 425 430
 Ala His Asp Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg
 435 440 445
 Gln Leu Arg Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln
 450 455 460
 Leu Lys Glu Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu
 465 470 475 480
 Gln Ser Leu Ser Leu Gln Arg Arg Leu Glu Gln Lys Phe Trp Ser Gln
 485 490 495
 Glu Lys Asn Met Leu Val Gln Glu Ser Gln Gln Phe Lys His Asn Phe
 500 505 510
 Leu Leu Leu Phe Met Lys Leu Arg Trp Phe Leu Lys Arg Trp Arg Gln
 515 520 525
 Gly Lys Val Leu Pro Ser Glu Gly Asp Asp Phe Leu Glu Val Asn Ser
 530 535 540
 Met Lys Val Leu Tyr Leu Leu Met Glu Glu Glu Glu Ile Asn Ala Gln

545 550 555 560
 His Ser Asp Asn Lys Ala Cys Thr Gly Asp Ser Trp Thr Gln Asn Thr
 565 570 575
 Pro Asn Glu Tyr Ile Lys Thr Leu Ala Asp Met Lys Val Thr Leu Lys
 580 585 590
 Glu Leu Cys Trp Leu Leu Arg Asp Glu Arg Arg Gly Leu Thr Glu Leu
 595 600 605
 Gln Gln Gln Phe Ala Lys Ala Lys Ala Thr Trp Glu Thr Glu Arg Ala
 610 615 620
 Glu Leu Lys Gly His Thr Ser Gln Met Glu Leu Lys Thr Gly Lys Gly
 625 630 635 640
 Ala Gly Glu Arg Ala Gly Pro Asp Trp Lys Ala Ala Leu Gln Arg Glu
 645 650 655
 Arg Glu Glu Gln Gln His Leu Leu Ala Glu Ser Tyr Ser Ala Val Met
 660 665 670
 Glu Leu Thr Arg Gln Leu Gln Ile Ser Glu Arg Asn Trp Ser Gln Glu
 675 680 685
 Lys Leu Gln Leu Val Glu Arg Leu Gln Gly Glu Lys Gln Gln Val Glu
 690 695 700
 Gln Gln Val Lys Glu Leu Gln Asn Arg Leu Ser Gln Leu Gln Lys Ala
 705 710 715 720
 Ala Asp Pro Trp Val Leu Lys His Ser Glu Leu Glu Lys Gln Asp Asn
 725 730 735
 Ser Trp Lys Glu Thr Arg Ser Glu Lys Ile His Asp Lys Glu Ala Val
 740 745 750
 Ser Glu Val Glu Leu Gly Gly Asn Gly Leu Lys Arg Thr Lys Ser Val
 755 760 765
 Ser Ser Met Ser Glu Phe Glu Ser Leu Leu Asp Cys Ser Pro Tyr Leu
 770 775 780
 Ala Gly Gly Asp Ala Arg Gly Lys Lys Leu Pro Asn Asn Pro Ala Phe
 785 790 795 800
 Gly Phe Val Ser Ser Glu Pro Gly Asp Pro Glu Lys Asp Thr Lys Glu
 805 810 815
 Lys Pro Gly Leu Ser Ser Arg Asp Cys Asn His Leu Gly Ala Leu Ala
 820 825 830
 Cys Gln Asp Pro Pro Gly Arg Gln Met Gln Arg Ser Tyr Thr Ala Pro

835	840	845
Asp Lys Thr Gly Ile Arg Val Tyr Tyr Ser Pro Pro Val Ala Arg Arg		
850	855	860
Leu Gly Val Pro Val Val His Asp Lys Glu Gly Lys Ile Ile Ile Glu		
865	870	875
Pro Gly Phe Leu Phe Thr Thr Ala Lys Pro Lys Glu Ser Ala Glu Ala		
885	890	895
Asp Gly Leu Ala Glu Ser Ser Tyr Gly Arg Trp Leu Cys Asn Phe Ser		
900	905	910
Arg Gln Arg Leu Asp Gly Gly Ser Ala Gly Ser Pro Ser Ala Ala Gly		
915	920	925
Pro Gly Phe Pro Ala Ala Leu His Asp Phe Glu Met Ser Gly Asn Met		
930	935	940
Ser Asp Asp Met Lys Glu Ile Thr Asn Cys Val Arg Gln Ala Met Arg		
945	950	955
Ser Gly Ser Leu Glu Arg Lys Val Lys Ser Thr Ser Ser Gln Thr Val		
965	970	975
Gly Leu Ala Ser Val Gly Thr Gln Thr Ile Arg Thr Val Ser Val Gly		
980	985	990
Leu Gln Thr Asp Pro Pro Arg Ser Ser Leu His Gly Lys Ala Trp Ser		
995	1000	1005
Pro Arg Ser Ser Ser Leu Val Ser Val Arg Ser Lys Gln Ile Ser Ser		
1010	1015	1020
Ser Leu Asp Lys Val His Ser Arg Ile Glu Arg Pro Cys Cys Ser Pro		
1025	1030	1035
Lys Tyr Gly Ser Pro Lys Leu Gln Arg Arg Ser Val Ser Lys Leu Asp		
1045	1050	1055
Ser Ser Lys Asp Arg Ser Leu Trp Asn Leu His Gln Gly Lys Gln Asn		
1060	1065	1070
Gly Ser Ala Trp Ala Arg Ser Thr Thr Thr Arg Asp Ser Pro Val Leu		
1075	1080	1085
Arg Asn Ile Asn Asp Gly Leu Ser Ser Leu Phe Ser Val Val Glu His		
1090	1095	1100
Ser Gly Ser Thr Glu Ser Val Trp Lys Leu Gly Met Ser Glu Thr Arg		
1105	1110	1115
Ala Lys Pro Glu Pro Pro Lys Tyr Gly Ile Val Gln Glu Phe Phe Arg		

1125	1130	1135	
Asn Ala Cys Gly Arg Ala Pro Ser Pro Thr Ser Ser Ala Gly Glu Glu			
1140	1145	1150	
Gly Thr Lys Lys Pro Glu Pro Leu Ser Pro Ala Ser Tyr His Gln Pro			
1155	1160	1165	
Glu Gly Val Ala Arg Ile Leu Asn Lys Lys Ala Ala Lys Leu Gly Ser			
1170	1175	1180	
Ser Glu Glu Val Arg Leu Thr Met Leu Pro Gln Val Gly Lys Asp Gly			
1185	1190	1195	1200
Val Leu Arg Asp Gly Asp Gly Ala Val Val Leu Pro Asn Glu Asp Ala			
1205	1210	1215	
Val Cys Asp Cys Ser Thr Gln Ser Leu Thr Ser Cys Phe Ala Arg Ser			
1220	1225	1230	
Ser Arg Ser Ala Ile Arg His Ser Pro Ser Lys Cys Arg Leu His Pro			
1235	1240	1245	
Ser Glu Ser Ser Trp Gly Gly Glu Glu Arg Ala Leu Pro Pro Ser Glu			
1250	1255	1260	

<210> 4962

<211> 633

<212> PRT

<213> Homo sapiens

<400> 585

Met Glu Ser Gly Pro Lys Met Leu Ala Pro Val Cys Leu Val Glu Asn
1 5 10 15
Asn Asn Glu Gln Leu Leu Val Asn Gln Gln Ala Ile Gln Ile Leu Glu
20 25 30
Lys Ile Ser Gln Pro Val Val Val Val Ala Ile Val Gly Leu Tyr Arg
35 40 45
Thr Gly Lys Ser Tyr Leu Met Asn His Leu Ala Gly Gln Asn His Gly
50 55 60
Phe Pro Leu Gly Ser Thr Val Gln Ser Glu Thr Lys Gly Ile Trp Met
65 70 75 80

Trp Cys Val Pro His Pro Ser Lys Pro Asn His Thr Leu Val Leu Leu
 85 90 95
 Asp Thr Glu Gly Leu Gly Asp Val Glu Lys Gly Asp Pro Lys Asn Asp
 100 105 110
 Ser Trp Ile Phe Ala Leu Ala Val Leu Leu Cys Ser Thr Phe Val Tyr
 115 120 125
 Asn Ser Met Ser Thr Ile Asn His Gln Ala Leu Glu Gln Leu His Tyr
 130 135 140
 Val Thr Glu Leu Thr Glu Leu Ile Lys Ala Lys Ser Ser Pro Arg Pro
 145 150 155 160
 Asp Gly Val Glu Asp Ser Thr Glu Phe Val Ser Phe Phe Pro Asp Phe
 165 170 175
 Leu Trp Thr Val Arg Asp Phe Thr Leu Glu Leu Lys Leu Asn Gly His
 180 185 190
 Pro Ile Thr Glu Asp Glu Tyr Leu Glu Asn Ala Leu Lys Leu Ile Gln
 195 200 205
 Gly Asn Asn Pro Arg Val Gln Thr Ser Asn Phe Pro Arg Glu Cys Ile
 210 215 220
 Arg Arg Phe Phe Pro Lys Arg Lys Cys Phe Val Phe Asp Arg Pro Thr
 225 230 235 240
 Asn Asp Lys Asp Leu Leu Ala Asn Ile Glu Lys Val Ser Glu Lys Gln
 245 250 255
 Leu Asp Pro Lys Phe Gln Glu Gln Thr Asn Ile Phe Cys Ser Tyr Ile
 260 265 270
 Phe Thr His Ala Arg Thr Lys Thr Leu Arg Glu Gly Ile Thr Val Thr
 275 280 285
 Gly Asn Arg Leu Gly Thr Leu Ala Val Thr Tyr Val Glu Ala Ile Asn
 290 295 300
 Ser Gly Ala Val Pro Cys Leu Glu Asn Ala Val Ile Thr Leu Ala Gln
 305 310 315 320
 Arg Glu Asn Ser Ala Ala Val Gln Arg Ala Ala Asp Tyr Tyr Ser Gln
 325 330 335
 Gln Met Ala Gln Arg Val Lys Leu Pro Thr Asp Thr Leu Gln Glu Leu
 340 345 350
 Leu Asp Met His Ala Ala Cys Glu Arg Glu Ala Ile Ala Ile Phe Met
 355 360 365

Glu His Ser Phe Lys Asp Glu Asn Gln Glu Phe Gln Lys Lys Phe Met
 370 375 380
 Glu Thr Thr Met Asn Lys Lys Gly Asp Phe Leu Leu Gln Asn Glu Glu
 385 390 395 400
 Ser Ser Val Gln Tyr Cys Gln Ala Lys Leu Asn Glu Leu Ser Lys Gly
 405 410 415
 Leu Met Glu Ser Ile Ser Ala Gly Ser Phe Ser Val Pro Gly Gly His
 420 425 430
 Lys Leu Tyr Met Glu Thr Lys Glu Arg Ile Glu Gln Asp Tyr Trp Gln
 435 440 445
 Val Pro Arg Lys Gly Val Lys Ala Lys Glu Val Phe Gln Arg Phe Leu
 450 455 460
 Glu Ser Gln Met Val Ile Glu Glu Ser Ile Leu Gln Ser Asp Lys Ala
 465 470 475 480
 Leu Thr Asp Arg Glu Lys Ala Val Ala Val Asp Arg Ala Lys Lys Glu
 485 490 495
 Ala Ala Glu Lys Glu Gln Glu Leu Leu Lys Gln Lys Leu Gln Glu Gln
 500 505 510
 Gln Gln Gln Met Glu Ala Gln Asp Lys Ser Arg Lys Glu Asn Ile Ala
 515 520 525
 Gln Leu Lys Glu Lys Leu Gln Met Glu Arg Glu His Leu Leu Arg Glu
 530 535 540
 Gln Ile Met Met Leu Glu His Thr Gln Lys Val Gln Asn Asp Trp Leu
 545 550 555 560
 His Glu Gly Phe Lys Lys Lys Tyr Glu Glu Met Asn Ala Glu Ile Ser
 565 570 575
 Gln Phe Lys Arg Met Ile Asp Thr Thr Lys Asn Asp Asp Thr Pro Trp
 580 585 590
 Ile Ala Arg Thr Leu Asp Asn Leu Ala Asp Glu Leu Thr Ala Ile Leu
 595 600 605
 Ser Ala Pro Ala Lys Leu Ile Gly His Gly Val Lys Gly Val Ser Ser
 610 615 620
 Leu Phe Lys Lys His Lys Leu Pro Phe
 625 630

<210> 4963

<211> 779

<212> PRT

<213> Homo sapiens

<400> 586

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Met Leu Pro Cys His Ser Pro Ser Arg Ser Asp Gln Val Asn Leu Gly
 1             5             10             15
Pro Ser Ile Asn Ser Lys Leu Leu Gly Met Ser Thr Gln Asn Tyr Ala
      20             25             30
Leu Met Gln Val Ala Gly Gln Glu Gly Thr Phe Ser Leu Val Ala Leu
      35             40             45
Pro His Val Ala Ser Ala Gln Pro Ile Gln Lys Pro Arg Met Ser Leu
      50             55             60
Pro Glu Asn Leu Lys Leu Pro Ile Pro Arg Tyr Gln Pro Pro Arg Asn
      65             70             75             80
Ser Lys Ala Ser Arg Lys Lys Pro Ile Leu Ile Phe Pro Lys Ser Gly
      85             90             95
Cys Ser Lys Ala Pro Ala Gln Thr Gln Met Cys Pro Gln Met Ser Pro
      100            105            110
Ser Pro Pro His His Pro Glu Leu Leu Tyr Lys Pro Ser Pro Phe Glu
      115            120            125
Glu Val Pro Ser Leu Glu Gln Ala Pro Ala Ser Ile Ser Thr Ala Ala
      130            135            140
Leu Thr Asn Gly Ser Asp His Gly Asp Leu Arg Pro Pro Val Thr Asn
      145            150            155            160
Thr His Gly Ser Leu Asn Pro Pro Ala Thr Pro Ala Ser Ser Thr Pro
      165            170            175
Glu Glu Pro Ala Lys Gln Asp Leu Thr Ala Leu Ser Gly Lys Ala His
      180            185            190
Phe Val Ser Lys Ile Thr Ser Ser Lys Pro Ser Ala Val Ala Ser Glu
      195            200            205
Lys Phe Lys Glu Gln Val Asp Leu Ala Lys Thr Met Thr Asn Leu Ser
      210            215            220
Pro Thr Ile Leu Gly Asn Ala Val Gln Leu Ile Ser Ser Val Pro Lys
      225            230            235            240

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Gly Lys Leu Pro Ile Pro Pro Tyr Ser Arg Met Lys Thr Met Glu Val
 245 250 255
 Tyr Lys Ile Lys Ser Asp Ala Asn Ile Ala Gly Phe Ser Leu Pro Gly
 260 265 270
 Pro Lys Ala Asp Cys Asp Lys Ile Pro Ser Thr Thr Glu Gly Phe Asn
 275 280 285
 Ala Ala Thr Lys Val Ala Ser Arg Leu Pro Val Pro Gln Val Ser Gln
 290 295 300
 Gln Ser Ala Cys Glu Ser Ala Phe Cys Pro Pro Thr Lys Leu Asp Leu
 305 310 315 320
 Asn His Lys Thr Lys Leu Asn Ser Gly Ala Ala Lys Arg Lys Gly Arg
 325 330 335
 Lys Arg Lys Val Pro Asp Glu Ile Leu Ala Phe Gln Gly Lys Arg Arg
 340 345 350
 Lys Tyr Ile Ile Asn Lys Cys Arg Asp Gly Lys Glu Arg Val Lys Asn
 355 360 365
 Asp Pro Gln Glu Phe Arg Asp Gln Lys Leu Gly Thr Leu Lys Lys Tyr
 370 375 380
 Arg Ser Ile Met Pro Lys Pro Ile Met Val Ile Pro Thr Leu Ala Ser
 385 390 395 400
 Leu Ala Ser Pro Thr Thr Leu Gln Ser Gln Met Leu Gly Gly Leu Gly
 405 410 415
 Gln Asp Val Leu Leu Asn Asn Ser Leu Thr Pro Lys Tyr Leu Gly Cys
 420 425 430
 Lys Gln Asp Asn Ser Ser Ser Pro Lys Pro Ser Ser Val Phe Arg Asn
 435 440 445
 Gly Phe Ser Gly Ile Lys Lys Pro Trp His Arg Cys His Val Cys Asn
 450 455 460
 His His Phe Gln Phe Lys Gln His Leu Arg Asp His Met Asn Thr His
 465 470 475 480
 Thr Asn Arg Arg Pro Tyr Ser Cys Arg Ile Cys Arg Lys Ser Tyr Val
 485 490 495
 Arg Pro Gly Ser Leu Ser Thr His Met Lys Leu His His Gly Glu Asn
 500 505 510
 Arg Leu Lys Lys Leu Met Cys Cys Glu Phe Cys Ala Lys Val Phe Gly
 515 520 525

His Ile Arg Val Tyr Phe Gly His Leu Lys Glu Val His Arg Val Val
 530 535 540
 Ile Ser Thr Glu Pro Ala Pro Ser Glu Leu Gln Pro Gly Asp Ile Pro
 545 550 555 560
 Lys Asn Arg Asp Met Ser Val Arg Gly Met Glu Gly Ser Leu Glu Arg
 565 570 575
 Glu Asn Lys Ser Asn Leu Glu Glu Asp Phe Leu Leu Asn Gln Ala Asp
 580 585 590
 Glu Val Lys Leu Gln Ile Lys Cys Gly Arg Cys Gln Ile Thr Ala Gln
 595 600 605
 Ser Phe Ala Glu Ile Lys Phe His Leu Leu Gly Val His Gly Glu Glu
 610 615 620
 Ile Glu Gly Arg Leu Gln Glu Gly Thr Phe Pro Gly Ser Lys Gly Thr
 625 630 635 640
 Gln Glu Glu Leu Val Gln His Ala Ser Pro Asp Trp Lys Arg His Pro
 645 650 655
 Glu Arg Gly Lys Pro Glu Lys Val His Ser Ser Ser Glu Glu Ser His
 660 665 670
 Ala Cys Pro Arg Leu Lys Arg Gln Leu His Leu His Gln Asn Gly Val
 675 680 685
 Glu Met Leu Met Glu Asn Glu Gly Pro Gln Ser Gly Thr Asn Lys Pro
 690 695 700
 Arg Glu Thr Cys Gln Gly Pro Glu Cys Pro Gly Leu His Thr Phe Leu
 705 710 715 720
 Leu Trp Ser His Ser Gly Phe Asn Cys Leu Leu Cys Ala Glu Met Leu
 725 730 735
 Gly Arg Lys Glu Asp Leu Leu His His Trp Lys His Gln His Asn Cys
 740 745 750
 Glu Asp Pro Ser Lys Leu Trp Ala Ile Leu Asn Thr Val Ser Asn Gln
 755 760 765
 Gly Val Ile Glu Leu Ser Ser Glu Ala Glu Lys
 770 775

<210> 4964

<211> 353

<212> PRT

<213> Homo sapiens

<400> 587

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Met Glu Phe Arg Lys Thr Met Asp Ile Asp His Thr Leu Asp Trp Gln
  1             5             10             15
Pro Pro Glu Val Ile Gln Lys Tyr Met Pro Gly Gly Leu Cys Gly Tyr
      20             25             30
Asp Arg Asp Gly Cys Pro Val Trp Tyr Asp Ile Thr Gly Pro Leu Asp
      35             40             45
Pro Lys Gly Leu Leu Phe Ser Val Thr Lys Gln Asp Leu Leu Lys Thr
      50             55             60
Lys Met Arg Asp Cys Glu Arg Ile Leu His Glu Cys Asp Leu Gln Thr
      65             70             75             80
Glu Arg Leu Gly Lys Lys Ile Glu Thr Ile Val Met Ile Phe Asp Cys
      85             90             95
Glu Gly Leu Gly Leu Lys His Phe Trp Lys Pro Leu Val Glu Val Tyr
      100            105            110
Gln Glu Phe Phe Gly Leu Leu Glu Glu Asn Tyr Pro Glu Thr Leu Lys
      115            120            125
Phe Met Leu Ile Val Lys Ala Thr Lys Leu Phe Pro Val Gly Tyr Asn
      130            135            140
Leu Met Lys Pro Phe Leu Ser Glu Asp Thr Arg Arg Lys Ile Ile Val
      145            150            155            160
Leu Gly Asn Asn Trp Lys Glu Gly Leu Leu Lys Leu Ile Ser Pro Glu
      165            170            175
Glu Leu Pro Ala Gln Phe Gly Gly Thr Leu Thr Asp Pro Asp Gly Asn
      180            185            190
Pro Lys Cys Leu Thr Lys Ile Asn Tyr Gly Gly Glu Ile Pro Lys Ser
      195            200            205
Met Tyr Val Arg Asp Gln Val Lys Thr Gln Tyr Glu His Ser Val Gln
      210            215            220
Ile Asn Arg Gly Ser Ser His Gln Val Glu Tyr Glu Ile Leu Phe Pro
      225            230            235            240
Gly Cys Val Leu Arg Trp Gln Phe Ser Ser Asp Gly Ala Asp Ile Gly
      245            250            255

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Phe Gly Val Phe Leu Lys Thr Lys Met Gly Glu Arg Gln Arg Ala Gly
 260 265 270
 Glu Met Thr Glu Val Leu Pro Ser Gln Arg Tyr Asn Ala His Met Val
 275 280 285
 Pro Glu Asp Gly Asn Leu Thr Cys Ser Glu Ala Gly Val Tyr Val Glu
 290 295 300
 Ser Glu Ser Gly Lys Ser Cys Cys His Leu Pro Val Ile Ile Cys Ser
 305 310 315 320
 His Glu Leu Gln Asn Ser His Ser Asn Ser Gln Val Met Ala Tyr Gln
 325 330 335
 Met Val Arg Lys Cys Lys Leu Ser Arg Pro Leu Pro Leu Pro Ala Ser
 340 345 350
 Asn

<210> 4965

<211> 606

<212> PRT

<213> Homo sapiens

<400> 588

Met Cys Leu Glu Lys Arg Tyr Leu Asp Val Leu Ser Asp Val Thr Gly
 1 5 10 15
 Pro Gln Val Ser Cys Tyr Ile Thr Ala Pro Ser Tyr Val Leu Gln Gln
 20 25 30
 Leu Glu Cys Arg Ile Ile Asn His Met Ser Ser Leu Ile Val Gly Asp
 35 40 45
 Asn Glu Glu Leu Val Ser Asn Val Ile Thr Ile Glu Cys Ser Asp Lys
 50 55 60
 Glu Lys Arg Val Pro Phe Pro Ile Gly Ile Ala Ile Pro Phe Thr Ala
 65 70 75 80
 Arg Tyr Arg Gly Asn Tyr Arg Asp Ile Met Val Lys Val Cys Asp Ile
 85 90 95
 Asn Leu Gln Ser Ser Tyr Leu Asn Pro Asn Ser Leu Glu Gly Met Lys
 100 105 110

Gly Gly Tyr Lys Gly Thr Cys Ala Ser Val Lys Val Tyr Lys Leu Gly
 115 120 125
 Ile Phe Ser Val Val Ser Cys Leu Lys Lys Glu Ser Phe Thr Val Thr
 130 135 140
 Lys Lys Gly Leu Ala Leu Lys Ser Ser Met Asp Ser Arg Ile Ser Leu
 145 150 155 160
 Asn Tyr Pro Pro Gly Val Phe Thr Ser Pro Val Leu Val Gln Leu Lys
 165 170 175
 Ile Gln Pro Val Asp Pro Ala Leu Val Ala His Leu Lys Ala Gln Gln
 180 185 190
 Asp Thr Phe Tyr Ser Val Gln Ser Thr Ser Pro Leu Ile His Ile Gln
 195 200 205
 His Pro Ser Thr Tyr Pro Phe Gln Lys Pro Val Thr Leu Phe Leu Pro
 210 215 220
 Cys Ser Pro Tyr Leu Asp Lys Asn Asn Leu Gly Ser Glu Ile Asp His
 225 230 235 240
 Lys Arg Arg Ala Ser Ala Thr Ile Asn Arg Ile Thr Pro Ser Tyr Phe
 245 250 255
 Asn Arg Thr Lys Ile Ala Ser Ile Arg Lys Pro Arg Lys Asn Ala Ser
 260 265 270
 Glu Cys Leu Lys Leu Leu Gly Phe Arg Ser Gln Asp Ser Gly Trp Cys
 275 280 285
 Gly Leu Asp Asp Val Val Lys Thr Ile Gln Ser Gly Leu Val Ser Val
 290 295 300
 Glu Leu Tyr Glu His Leu Glu Arg Phe Ile Val Leu His Leu Ser Ser
 305 310 315 320
 Thr Met Asp Asn Ser His Leu Val Thr Phe Val Lys Ser Leu Glu Glu
 325 330 335
 Ala Met Leu Ser Thr Thr Ala Cys Ile Val Leu Ser His Gln Lys Asp
 340 345 350
 Asn Pro His Arg Ile Ala Val Leu Val Val Pro Ser Lys Asp Leu Ser
 355 360 365
 Gln Val Leu Lys Asp Leu His Leu Glu Gly Phe Gly Gly Pro Pro Glu
 370 375 380
 Pro Ser Arg His Phe Gln Val Arg Glu Gly Glu Gln Leu Leu Leu Arg
 385 390 395 400

Phe Thr Gly Asn Ile Phe Ala Ser Ser Asn Gly Lys Asp Tyr Gly Lys
 405 410 415
 Asp Tyr Thr Leu Ile Phe His Leu Gln Arg Lys Pro Arg Leu Glu Leu
 420 425 430
 Gln Ile Lys Glu Val Asp Glu Phe Gly Asn Tyr Ser Cys Pro His Tyr
 435 440 445
 Lys Gly Thr Ile Val Val Tyr Lys Val Pro Lys Gly Lys Ile Val Pro
 450 455 460
 Asn Leu Asn Gln Ser Leu Val Ile Asn Glu Asn His Ser Gln Leu Pro
 465 470 475 480
 Ile Cys Lys Leu Pro Leu Lys Leu Pro Lys His Lys Lys Leu Ile Asn
 485 490 495
 His Pro Gln Ser Thr Lys Arg Val Ser Lys Asp Pro Val Glu Ala Leu
 500 505 510
 Trp Asp Asn Leu Leu His Trp Leu Ala Glu Glu Leu Ser Glu Glu Asn
 515 520 525
 Ala Glu Ser Leu Ser Ser Thr Leu Pro Leu Arg Arg Ser Thr Ile Gln
 530 535 540
 Leu Ile Lys Leu Lys Asn Pro Asp Asp Leu Thr Glu Gln Ile His Glu
 545 550 555 560
 Phe Leu Cys Phe Trp Lys Lys Ser Leu Pro Thr Phe Thr Asp Lys Leu
 565 570 575
 Arg Leu Leu Ala Arg His Leu Arg Lys Ile Gly Arg Ser Asp Leu Ala
 580 585 590
 Glu Glu Leu Lys Phe Lys Trp Glu Asn Lys Val Phe Thr Glu
 595 600 605

<210> 4966

<211> 151

<212> PRT

<213> Homo sapiens

<400> 589

Met Ala Thr Ile Thr Met Gln Ala Tyr Ser Arg Gly Phe Leu Ala Arg
 1 5 10 15

Arg	Arg	Tyr	Arg	Lys	Met	Leu	Glu	Glu	His	Lys	Ala	Val	Ile	Leu	Gln	
			20						25						30	
Lys	Tyr	Ala	Arg	Ala	Trp	Leu	Ala	Arg	Arg	Arg	Phe	Gln	Ser	Ile	Arg	
			35						40						45	
Arg	Phe	Val	Leu	Asn	Ile	Gln	Leu	Thr	Tyr	Arg	Val	Gln	Arg	Leu	Gln	
			50						55						60	
Lys	Lys	Leu	Glu	Asp	Gln	Asn	Lys	Glu	Asn	His	Gly	Leu	Val	Glu	Lys	
65						70						75			80	
Leu	Thr	Ser	Leu	Ala	Ala	Leu	Arg	Ala	Gly	Asp	Val	Glu	Lys	Ile	Gln	
			85						90						95	
Lys	Leu	Glu	Ala	Glu	Leu	Glu	Lys	Ala	Ala	Thr	His	Arg	Arg	Asn	Tyr	
			100						105						110	
Glu	Glu	Lys	Gly	Lys	Arg	Tyr	Arg	Asp	Ala	Val	Glu	Glu	Val	Ser	Cys	
115						120						125				
Gly	Arg	Val	Arg	Arg	Asp	Gly	Asn	Met	Arg	Thr	Leu	Cys	Glu	Lys	Asp	
130						135						140				
Glu	Arg	Cys	Gln	Leu	Phe	Leu										
145			150													

<210> 4967

<211> 731

<212> PRT

<213> Homo sapiens

<400> 590

Met	Met	Gln	Ala	Gln	Glu	Ser	Leu	Thr	Leu	Glu	Asp	Val	Ala	Val	Asp
1				5					10					15	
Phe	Thr	Trp	Glu	Glu	Trp	Gln	Phe	Leu	Ser	Pro	Ala	Gln	Lys	Asp	Leu
			20					25					30		
Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Ser	Asn	Leu	Val	Ala	Val	Gly
		35					40					45			
Tyr	Gln	Ala	Ser	Lys	Pro	Asp	Ala	Leu	Ser	Lys	Leu	Glu	Arg	Gly	Glu
	50					55					60				
Glu	Thr	Cys	Thr	Thr	Glu	Asp	Glu	Ile	Tyr	Ser	Arg	Ile	Cys	Ser	Glu
65					70					75					80

Ile Arg Lys Ile Asp Asp Pro Leu Gln His His Leu Gln Asn Gln Ser			
85	90	95	
Ile Gln Lys Ser Val Lys Gln Cys His Glu Gln Asn Met Phe Gly Asn			
100	105	110	
Ile Val Asn Gln Asn Lys Gly His Phe Leu Leu Lys Gln Asp Cys Asp			
115	120	125	
Thr Phe Asp Leu His Glu Lys Pro Leu Lys Ser Asn Leu Ser Phe Glu			
130	135	140	
Asn Gln Lys Arg Ser Ser Gly Leu Lys Asn Ser Ala Glu Phe Asn Arg			
145	150	155	160
Asp Gly Lys Ser Leu Phe His Ala Asn His Lys Gln Phe Tyr Thr Glu			
165	170	175	
Met Lys Phe Pro Ala Ile Ala Lys Pro Ile Asn Lys Ser Gln Phe Ile			
180	185	190	
Lys Gln Gln Arg Thr His Asn Ile Glu Asn Ala His Val Cys Ser Glu			
195	200	205	
Cys Gly Lys Ala Phe Leu Lys Leu Ser Gln Phe Ile Asp His Gln Arg			
210	215	220	
Val His Thr Gly Glu Lys Pro His Val Cys Ser Met Cys Gly Lys Ala			
225	230	235	240
Phe Ser Arg Lys Ser Arg Leu Met Asp His Gln Arg Thr His Thr Glu			
245	250	255	
Leu Lys His Tyr Glu Cys Thr Glu Cys Asp Lys Thr Phe Leu Lys Lys			
260	265	270	
Ser Gln Leu Asn Ile His Gln Lys Thr His Met Gly Gly Lys Pro Tyr			
275	280	285	
Thr Cys Ser Gln Cys Gly Lys Ala Phe Ile Lys Lys Cys Arg Leu Ile			
290	295	300	
Tyr His Gln Arg Thr His Thr Gly Glu Lys Pro His Gly Cys Ser Val			
305	310	315	320
Cys Gly Lys Ala Phe Ser Thr Lys Phe Ser Leu Thr Thr His Gln Lys			
325	330	335	
Thr His Thr Gly Glu Lys Pro Tyr Ile Cys Ser Glu Cys Gly Lys Gly			
340	345	350	
Phe Ile Glu Lys Arg Arg Leu Thr Ala His His Arg Thr His Thr Gly			
355	360	365	

Glu Lys Pro Phe Ile Cys Asn Lys Cys Gly Lys Gly Phe Thr Leu Lys
 370 375 380
 Asn Ser Leu Ile Thr His Gln Gln Thr His Thr Gly Glu Lys Leu Tyr
 385 390 395 400
 Thr Cys Ser Glu Cys Gly Lys Gly Phe Ser Met Lys His Cys Leu Met
 405 410 415
 Val His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu
 420 425 430
 Cys Gly Lys Gly Phe Ala Leu Lys Ser Pro Leu Ile Arg His Gln Arg
 435 440 445
 Thr His Thr Gly Glu Lys Pro Tyr Val Cys Thr Glu Cys Arg Lys Gly
 450 455 460
 Phe Thr Met Lys Ser Asp Leu Ile Val His Gln Arg Thr His Thr Ala
 465 470 475 480
 Glu Lys Pro Tyr Ile Cys Asn Asp Cys Gly Lys Gly Phe Thr Val Lys
 485 490 495
 Ser Arg Leu Ile Val His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr
 500 505 510
 Val Cys Gly Glu Cys Gly Lys Gly Phe Pro Ala Lys Ile Arg Leu Met
 515 520 525
 Gly His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Ile Cys Asn Glu
 530 535 540
 Cys Gly Lys Gly Phe Thr Glu Lys Ser His Leu Asn Val His Arg Arg
 545 550 555 560
 Thr His Thr Gly Glu Lys Pro Tyr Val Cys Ser Glu Cys Gly Lys Asp
 565 570 575
 Leu Thr Gly Lys Ser Met Leu Ile Ala His Gln Arg Thr His Thr Gly
 580 585 590
 Glu Lys Pro Tyr Ile Cys Asn Glu Cys Gly Lys Gly Phe Thr Met Lys
 595 600 605
 Ser Thr Leu Ser Ile His Gln Gln Thr His Thr Gly Glu Lys Pro Tyr
 610 615 620
 Lys Cys Asn Glu Cys Asp Lys Thr Phe Arg Lys Lys Thr Cys Leu Ile
 625 630 635 640
 Gln His Gln Arg Phe His Thr Gly Lys Thr Ser Phe Ala Cys Thr Glu

	645		650		655
Cys Gly Lys Phe Ser Leu Arg Lys Asn Asp Leu Ile Thr His Gln Arg					
	660		665		670
Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Ser Asp Cys Gly Lys Ala					
	675		680		685
Phe Thr Thr Lys Ser Gly Leu Asn Val His Gln Arg Lys His Thr Gly					
	690		695		700
Glu Arg Pro Tyr Gly Cys Ser Asp Cys Gly Lys Ala Phe Ala His Leu					
705		710		715	720
Ser Ile Leu Val Lys His Arg Arg Ile His Arg					
	725		730		

<210> 4968

<211> 1186

<212> PRT

<213> Homo sapiens

<400> 591

Met Tyr Gln Ala Leu Glu Gln Gly Gly Met Thr Phe Gly Trp Val Cys			
1	5	10	15
Trp Met Ile Leu Phe Asp Ser Ser Leu Tyr Phe Leu Cys Gly Trp Tyr			
	20	25	30
Leu Ser Asn Leu Ile Pro Gly Thr Phe Gly Leu Arg Lys Pro Trp Tyr			
	35	40	45
Phe Pro Phe Thr Ala Ser Tyr Trp Lys Ser Val Gly Phe Leu Val Glu			
	50	55	60
Lys Arg Gln Tyr Phe Leu Ser Ser Ser Leu Phe Phe Phe Asn Glu Asn			
65	70	75	80
Phe Asp Asn Lys Gly Ser Ser Leu Gln Asn Arg Glu Gly Glu Leu Glu			
	85	90	95
Gly Ser Ala Pro Gly Val Thr Leu Val Ser Val Thr Lys Glu Tyr Glu			
	100	105	110
Gly His Lys Ala Val Val Gln Asp Leu Ser Leu Thr Phe Tyr Arg Asp			
	115	120	125
Gln Ile Thr Ala Leu Leu Gly Thr Asn Gly Ala Gly Lys Thr Thr Ile			

130	135	140
Ile Ser Met Leu Thr Gly Leu His Pro Pro Thr Ser Gly Thr Ile Ile		
145	150	155
Ile Asn Gly Lys Asn Leu Gln Thr Asp Leu Ser Arg Val Arg Met Glu		160
	165	170
Leu Gly Val Cys Pro Gln Gln Asp Ile Leu Leu Asp Asn Leu Thr Val		175
	180	185
Arg Glu His Leu Leu Leu Phe Ala Ser Ile Lys Ala Pro Gln Trp Thr		190
	195	200
Lys Lys Glu Leu His Gln Gln Val Asn Gln Thr Leu Gln Asp Val Asp		205
	210	215
Leu Thr Gln His Gln His Lys Gln Thr Arg Ala Leu Ser Gly Gly Leu		220
225	230	235
Lys Arg Lys Leu Ser Leu Gly Ile Ala Phe Met Gly Met Ser Arg Thr		240
	245	250
Val Val Leu Asp Glu Pro Thr Ser Gly Val Asp Pro Cys Ser Arg His		255
	260	265
Ser Leu Trp Asp Ile Leu Leu Lys Tyr Arg Glu Gly Arg Thr Ile Ile		270
	275	280
Phe Thr Thr His His Leu Asp Glu Ala Glu Ala Leu Ser Asp Arg Val		285
	290	295
Ala Val Leu Gln His Gly Arg Leu Arg Cys Cys Gly Pro Pro Phe Cys		300
305	310	315
Leu Lys Glu Ala Tyr Gly Gln Gly Leu Arg Leu Thr Leu Thr Arg Gln		320
	325	330
Pro Ser Val Leu Glu Ala His Asp Leu Lys Asp Met Ala Cys Val Thr		335
	340	345
Ser Leu Ile Lys Ile Tyr Ile Pro Gln Ala Phe Leu Lys Asp Ser Ser		350
	355	360
Gly Ser Glu Leu Thr Tyr Thr Ile Pro Lys Asp Thr Asp Lys Ala Cys		365
	370	375
Leu Lys Gly Leu Phe Gln Ala Leu Asp Gly Asn Leu His Gln Leu His		380
385	390	395
Leu Thr Gly Tyr Gly Ile Ser Asp Thr Thr Leu Glu Glu Val Phe Leu		400
	405	410
Met Leu Leu Gln Asp Ser Asn Lys Lys Ser His Ile Ala Leu Gly Thr		415

420	425	430
Glu Ser Glu Leu Gln Asn His Arg Pro Thr Gly His Leu Ser Gly Tyr		
435	440	445
Cys Gly Ser Leu Ala Arg Pro Ala Thr Val Gln Gly Val Gln Leu Leu		
450	455	460
Arg Ala Gln Val Ala Ala Ile Leu Ala Arg Arg Leu Arg Arg Thr Leu		
465	470	475
Arg Ala Gly Lys Ser Thr Leu Ala Asp Leu Leu Leu Pro Val Leu Phe		
485	490	495
Val Ala Leu Ala Met Gly Leu Phe Met Val Arg Pro Leu Ala Thr Glu		
500	505	510
Tyr Pro Pro Leu Arg Leu Thr Pro Gly His Tyr Gln Arg Ala Glu Thr		
515	520	525
Tyr Phe Phe Ser Ser Gly Gly Asp Asn Leu Asp Leu Thr Arg Val Leu		
530	535	540
Leu Arg Lys Phe Arg Asp Gln Asp Leu Pro Cys Ala Asp Leu Asn Pro		
545	550	555
Arg Gln Lys Asn Ser Ser Cys Trp Arg Thr Asp Pro Phe Ser His Pro		
565	570	575
Glu Phe Gln Asp Ser Cys Gly Cys Leu Lys Arg Pro Asn Arg Ser Ala		
580	585	590
Ser Ala Pro Tyr Leu Thr Asn His Leu Gly His Thr Leu Leu Asn Leu		
595	600	605
Ser Gly Phe Asn Met Glu Glu Tyr Leu Leu Ala Pro Ser Glu Lys Pro		
610	615	620
Arg Leu Gly Gly Trp Ser Phe Gly Leu Lys Ile Pro Ser Glu Ala Gly		
625	630	635
Gly Ala Asn Gly Asn Ile Ser Lys Pro Pro Thr Leu Ala Lys Val Trp		
645	650	655
Tyr Asn Gln Lys Gly Phe His Ser Leu Pro Ser Tyr Leu Asn His Leu		
660	665	670
Asn Asn Leu Ile Leu Trp Gln His Leu Pro Pro Thr Val Asp Trp Arg		
675	680	685
Gln Tyr Gly Ile Thr Leu Tyr Ser His Pro Tyr Gly Gly Ala Leu Leu		
690	695	700
Asn Glu Asp Lys Ile Leu Glu Ser Ile Arg Gln Cys Gly Val Ala Leu		

705	710	715	720
Cys Ile Val Leu Gly Phe Ser Ile Leu Ser Ala Ser Ile Gly Ser Ser			
	725	730	735
Val Val Arg Asp Arg Val Ile Gly Ala Lys Arg Leu Gln His Ile Ser			
	740	745	750
Gly Leu Gly Tyr Arg Met Tyr Trp Phe Thr Asn Phe Leu Tyr Asp Met			
	755	760	765
Leu Phe Tyr Leu Val Ser Val Cys Leu Cys Val Ala Val Ile Val Ala			
	770	775	780
Phe Gln Leu Thr Ala Phe Thr Phe Arg Lys Asn Leu Ala Ala Thr Ala			
785	790	795	800
Leu Leu Leu Ser Leu Phe Gly Tyr Ala Thr Leu Pro Trp Met Tyr Leu			
	805	810	815
Met Ser Arg Ile Phe Ser Ser Ser Asp Val Ala Phe Ile Ser Tyr Val			
	820	825	830
Ser Leu Asn Phe Ile Phe Gly Leu Cys Thr Met Leu Ile Thr Ile Met			
	835	840	845
Pro Arg Leu Leu Ala Ile Ile Ser Lys Ala Lys Asn Leu Gln Asn Ile			
	850	855	860
Tyr Asp Val Leu Lys Trp Val Phe Thr Ile Phe Pro Gln Phe Cys Leu			
865	870	875	880
Gly Gln Gly Leu Val Glu Leu Cys Tyr Asn Gln Thr Lys Tyr Asp Leu			
	885	890	895
Thr His Asn Phe Gly Ile Asp Ser Tyr Val Ser Pro Phe Glu Met Asn			
	900	905	910
Phe Leu Gly Trp Ile Phe Val Gln Leu Ala Ser Gln Gly Thr Val Leu			
	915	920	925
Leu Leu Leu Arg Val Leu Leu His Trp Asp Leu Leu Arg Trp Pro Arg			
	930	935	940
Gly His Ser Thr Leu Gln Gly Thr Val Lys Ser Ser Lys Asp Thr Asp			
945	950	955	960
Val Glu Lys Glu Glu Lys Arg Val Phe Glu Gly Arg Thr Asn Gly Asp			
	965	970	975
Ile Leu Val Leu Tyr Asn Leu Ser Lys His Tyr Arg Arg Phe Phe Gln			
	980	985	990
Asn Ile Ile Ala Val Gln Asp Ile Ser Leu Gly Ile Pro Lys Gly Glu			

995	1000	1005
Cys Phe Gly Leu Leu Gly Val Asn Gly Ala Gly Lys Ser Thr Thr Phe		
1010	1015	1020
Lys Met Leu Asn Gly Glu Val Ser Leu Thr Ser Gly His Ala Ile Ile		
1025	1030	1035
Arg Thr Pro Met Gly Asp Ala Val Asp Leu Ser Ser Ala Gly Thr Ala		1040
1045	1050	1055
Gly Val Leu Ile Gly Tyr Cys Pro Gln Gln Asp Ala Leu Asp Glu Leu		
1060	1065	1070
Leu Thr Gly Trp Glu His Leu Tyr Tyr Tyr Cys Ser Leu Arg Gly Ile		
1075	1080	1085
Pro Arg Gln Cys Ile Pro Glu Val Ala Gly Asp Leu Ile Arg Arg Leu		
1090	1095	1100
His Leu Glu Ala His Ala Asp Lys Pro Val Ala Thr Tyr Ser Gly Gly		
1105	1110	1115
Thr Lys Arg Lys Leu Ser Thr Ala Leu Ala Leu Val Gly Lys Pro Asp		1120
1125	1130	1135
Ile Leu Leu Leu Asp Glu Pro Ser Ser Gly Met Asp Pro Cys Ser Lys		
1140	1145	1150
Arg Tyr Leu Trp Gln Thr Ile Met Lys Glu Val Arg Glu Gly Cys Ala		
1155	1160	1165
Ala Val Leu Thr Ser His Arg Phe Trp Tyr Gln Asp Asp Ala Gly Leu		
1170	1175	1180
Ile Lys		
1185		

<210> 4969

<211> 140

<212> PRT

<213> Homo sapiens

<400> 592

Met Tyr Ile Phe Phe Phe Phe Leu Lys Gln Met Ser Phe Asp Pro Asn
1 5 10 15
Leu Leu His Asn Asn Gly His Asn Gly Tyr Pro Asn Gly Thr Ser Ala
20 25 30

Ala Leu Arg Glu Thr Gly Val Ile Glu Lys Leu Leu Thr Ser Tyr Gly
 35 40 45
 Phe Ile Gln Cys Ser Glu Arg Gln Ala Arg Leu Phe Phe His Cys Ser
 50 55 60
 Gln Tyr Asn Gly Asn Leu Gln Asp Leu Lys Val Gly Gly Asn Leu Ser
 65 70 75 80
 Val Leu Leu Cys Lys Asn Val Ile Thr Lys Phe Val Leu His Ile Asn
 85 90 95
 Leu Phe Met Ser Val Phe Gln Lys Val Leu Cys Lys Leu Lys His Phe
 100 105 110
 Gly Leu Leu Val Val Leu Phe Ser Glu Glu Tyr Leu Tyr Lys Pro Ala
 115 120 125
 Glu Ser Leu Lys Asp Tyr Ile Cys Ile Tyr Leu Gln
 130 135 140

<210> 4970

<211> 177

<212> PRT

<213> Homo sapiens

<400> 593

Met Ser Ser Glu Thr Pro Thr Ser Arg Gln Leu Ser Glu Tyr Leu Lys
 1 5 10 15
 His Ala Lys Gly Arg Thr Arg Thr Ala Ile Arg Asn Gly Gln Val Trp
 20 25 30
 Glu Glu Ser Leu Lys Arg Leu Arg Gln Lys Ala Ser Leu Thr Asn Val
 35 40 45
 Thr Asp Pro Ser Leu Asp Leu Thr Ser Leu Ser Leu Glu Val Gly Cys
 50 55 60
 Gly Ala Pro Ala Pro Val Val Arg Cys Asp Pro Cys Ser Pro Tyr Arg
 65 70 75 80
 Thr Ile Thr Gly Asp Cys Asn Asn Arg Trp Arg Gly Leu Gly Cys Gly
 85 90 95
 Gly Arg Pro Phe Gln Pro Leu Arg Pro Ala Leu Pro Arg Pro Leu Ser
 100 105 110

Leu Gly His Ser Arg Gln Ile Cys His Cys Leu Ala His Leu Gly Trp
 115 120 125
 Arg Ser His Leu Pro His Leu Leu Lys Ile Ala Arg Leu Gln Pro Ser
 130 135 140
 Pro Ser Ser Pro Leu Cys Val Ser Gly Ser Gly Thr Phe Pro Arg Gly
 145 150 155 160
 Gly Gly Ala Pro Arg Leu Gln Gly Val Gly Ala Val Gln Arg Pro Gln
 165 170 175
 Ile

<210> 4971

<211> 930

<212> PRT

<213> Homo sapiens

<400> 594

Met Ala Gly Ala Ala Ala Val Ala Ala Gly Ala Ala Ala Gly Ala
 1 5 10 15
 Ala Ala Ala Ala Val Ser Val Ala Ala Pro Gly Arg Ala Ser Ala Pro
 20 25 30
 Pro Pro Pro Pro Pro Val Tyr Cys Val Cys Arg Gln Pro Tyr Asp Val
 35 40 45

Asn Arg Phe Met Ile Glu Cys Asp Ile Cys Lys Asp Trp Phe His Gly
 50 55 60
 Ser Cys Val Gly Val Glu Glu His His Ala Val Asp Ile Asp Leu Tyr
 65 70 75 80
 His Cys Pro Asn Cys Ala Val Leu His Gly Ser Ser Leu Met Lys Lys
 85 90 95
 Arg Arg Asn Trp His Arg His Asp Tyr Thr Glu Ile Asp Asp Gly Ser
 100 105 110
 Lys Pro Val Gln Ala Gly Thr Arg Thr Phe Ile Lys Glu Leu Arg Ser
 115 120 125
 Arg Val Phe Pro Ser Ala Asp Glu Ile Ile Ile Lys Met His Gly Ser

130	135	140			
Gln Leu Thr Gln Arg Tyr Leu Glu Lys His Gly Phe Asp Val Pro Ile					
145	150	155	160		
Met Val Pro Lys Leu Asp Asp Leu Gly Leu Arg Leu Pro Ser Pro Thr					
	165	170	175		
Phe Ser Val Met Asp Val Glu Arg Tyr Val Gly Gly Asp Lys Val Ile					
	180	185	190		
Asp Val Ile Asp Val Ala Arg Gln Ala Asp Ser Lys Met Thr Leu His					
	195	200	205		
Asn Tyr Val Lys Tyr Phe Met Asn Pro Asn Arg Pro Lys Val Leu Asn					
	210	215	220		
Val Ile Ser Leu Glu Phe Ser Asp Thr Lys Met Ser Glu Leu Val Glu					
225	230	235	240		
Val Pro Asp Ile Ala Lys Lys Leu Ser Trp Val Glu Asn Tyr Trp Pro					
	245	250	255		
Asp Asp Ser Val Phe Pro Lys Pro Phe Val Gln Lys Tyr Cys Leu Met					
	260	265	270		
Gly Val Gln Asp Ser Tyr Thr Asp Phe His Ile Asp Phe Gly Gly Thr					
	275	280	285		
Ser Val Trp Tyr His Val Leu Trp Gly Glu Lys Ile Phe Tyr Leu Ile					
	290	295	300		
Lys Pro Thr Asp Glu Asn Leu Ala Arg Tyr Glu Ser Trp Ser Ser Ser					
305	310	315	320		
Val Thr Gln Ser Glu Val Phe Phe Gly Asp Lys Val Asp Lys Cys Tyr					
	325	330	335		
Lys Cys Val Val Lys Gln Gly His Thr Leu Phe Val Pro Thr Gly Trp					
	340	345	350		
Ile His Ala Val Leu Thr Ser Gln Asp Cys Met Ala Phe Gly Gly Asn					
	355	360	365		
Phe Leu His Asn Leu Asn Ile Gly Met Gln Leu Arg Cys Tyr Glu Met					
	370	375	380		
Glu Lys Arg Leu Lys Thr Pro Asp Leu Phe Lys Phe Pro Phe Phe Glu					
385	390	395	400		
Ala Ile Cys Trp Phe Val Ala Lys Asn Leu Leu Glu Thr Leu Lys Glu					
	405	410	415		
Leu Arg Glu Asp Gly Phe Gln Pro Gln Thr Tyr Leu Val Gln Gly Val					

420	425	430
Lys Ala Leu His Thr Ala Leu Lys	Leu Trp Met Lys Lys	Glu Leu Val
435	440	445
Ser Glu His Ala Phe Glu Ile Pro	Asp Asn Val Arg Pro Gly His Leu	
450	455	460
Ile Lys Glu Leu Ser Lys Val Ile	Arg Ala Ile Glu Glu Glu Asn Gly	
465	470	475
Lys Pro Val Lys Ser Gln Gly Ile	Pro Ile Val Cys Pro Val Ser Arg	
485	490	495
Ser Ser Asn Glu Ala Thr Ser Pro	Tyr His Ser Arg Arg Lys Met Arg	
500	505	510
Lys Leu Arg Asp His Asn Val Arg	Thr Pro Ser Asn Leu Asp Ile Leu	
515	520	525
Glu Leu His Thr Arg Glu Val Leu	Lys Arg Leu Glu Met Cys Pro Trp	
530	535	540
Glu Glu Asp Ile Leu Ser Ser Lys	Leu Asn Gly Lys Phe Asn Lys His	
545	550	555
Leu Gln Pro Ser Ser Thr Val Pro	Glu Trp Arg Ala Lys Asp Asn Asp	
565	570	575
Leu Arg Leu Leu Leu Thr Asn Gly	Arg Ile Ile Lys Asp Glu Arg Gln	
580	585	590
Pro Phe Ala Asp Gln Ser Leu Tyr	Thr Ala Asp Ser Glu Asn Glu Glu	
595	600	605
Asp Lys Arg Arg Thr Lys Lys Ala	Lys Met Lys Ile Glu Glu Ser Ser	
610	615	620
Gly Val Glu Gly Val Glu His Glu	Glu Ser Gln Lys Pro Leu Asn Gly	
625	630	635
Phe Phe Thr Arg Val Lys Ser Glu	Leu Arg Ser Arg Ser Ser Gly Tyr	
645	650	655
Ser Asp Ile Ser Glu Ser Glu Asp	Ser Gly Pro Glu Cys Thr Ala Leu	
660	665	670
Lys Ser Ile Phe Thr Thr Glu Glu	Ser Glu Ser Ser Gly Asp Glu Lys	
675	680	685
Lys Gln Glu Ile Thr Ser Asn Phe	Lys Glu Glu Ser Asn Val Met Arg	
690	695	700
Asn Phe Leu Gln Lys Ser Gln Lys	Pro Ser Arg Ser Glu Ile Pro Ile	

705 710 715 720
 Lys Arg Glu Cys Pro Thr Ser Thr Ser Thr Glu Glu Glu Ala Ile Gln
 725 730 735
 Gly Met Leu Ser Met Ala Gly Leu His Tyr Ser Thr Cys Leu Gln Arg
 740 745 750
 Gln Ile Gln Ser Thr Asp Cys Ser Gly Glu Arg Asn Ser Leu Gln Asp
 755 760 765
 Pro Ser Ser Cys His Gly Ser Asn His Glu Val Arg Gln Leu Tyr Arg
 770 775 780
 Tyr Asp Lys Pro Val Glu Cys Gly Tyr His Val Lys Thr Glu Asp Pro
 785 790 795 800
 Asp Leu Arg Thr Ser Ser Trp Ile Lys Gln Phe Asp Thr Ser Arg Phe
 805 810 815
 His Pro Gln Asp Leu Ser Arg Ser Gln Lys Cys Ile Arg Lys Glu Gly
 820 825 830
 Ser Ser Glu Ile Ser Gln Arg Val Gln Ser Arg Asn Tyr Val Asp Ser
 835 840 845
 Ser Gly Ser Ser Leu Gln Asn Gly Lys Tyr Met Gln Asn Ser Asn Leu
 850 855 860
 Thr Ser Gly Ala Cys Gln Ile Ser Asn Gly Ser Leu Ser Pro Glu Arg
 865 870 875 880
 Pro Val Gly Glu Thr Ser Phe Ser Val Pro Leu His Pro Thr Lys Arg
 885 890 895
 Pro Ala Ser Asn Pro His Leu Ser Ala Thr Arg Gln Gln Lys Val Asn
 900 905 910
 Val Gln Lys Lys Glu Trp Gln Gln Pro Asn Asn Val Leu Gly Arg Ser
 915 920 925
 Leu Ser
 930

<210> 4972

<211> 755

<212> PRT

<213> Homo sapiens

<400> 595

Met Arg Lys Val Lys Lys Leu Arg Leu Asp Lys Glu Asn Thr Gly Ser
 1 5 10 15
 Trp Arg Ser Phe Ser Leu Asn Ser Glu Gly Ala Glu Arg Met Ala Thr
 20 25 30
 Ser Tyr Asp Phe His Ser Glu Ser Gly Leu Phe Leu Phe Gln Ala Ser
 35 40 45
 Asn Ser Leu Phe His Cys Arg Asp Gly Gly Lys Asn Gly Phe Met Val
 50 55 60
 Ser Pro Met Lys Pro Leu Glu Ile Lys Thr Gln Cys Ser Gly Pro Arg
 65 70 75 80
 Met Asp Pro Lys Ile Cys Pro Ala Asp Pro Ala Phe Phe Ser Phe Ile
 85 90 95
 Asn Asn Ser Asp Leu Trp Val Ala Asn Ile Glu Thr Gly Glu Glu Arg
 100 105 110
 Arg Leu Thr Phe Cys His Gln Gly Leu Ser Asn Val Leu Asp Asp Pro
 115 120 125
 Lys Ser Ala Gly Val Ala Thr Phe Val Ile Gln Glu Glu Phe Asp Arg
 130 135 140
 Phe Thr Gly Tyr Trp Trp Cys Pro Thr Ala Ser Trp Glu Gly Ser Glu
 145 150 155 160
 Gly Leu Lys Thr Leu Arg Ile Leu Tyr Glu Glu Val Asp Glu Ser Glu
 165 170 175
 Val Glu Val Ile His Val Pro Ser Pro Ala Leu Glu Glu Arg Lys Thr
 180 185 190
 Asp Ser Tyr Arg Tyr Pro Arg Thr Gly Ser Lys Asn Pro Lys Ile Ala
 195 200 205
 Leu Lys Leu Ala Glu Phe Gln Thr Asp Ser Gln Gly Lys Ile Val Ser
 210 215 220
 Thr Gln Glu Lys Glu Leu Val Gln Pro Phe Ser Ser Leu Phe Pro Lys
 225 230 235 240
 Val Glu Tyr Ile Ala Arg Ala Gly Trp Thr Arg Asp Gly Lys Tyr Ala
 245 250 255
 Trp Ala Met Phe Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu
 260 265 270

Leu Pro Pro Ala Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg			
275	280	285	
Leu Ala Ser Ala Arg Ala Val Pro Arg Asn Val Gln Pro Tyr Val Val			
290	295	300	
Tyr Glu Glu Val Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr			
305	310	315	320
Pro Phe Pro Gln Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala			
	325	330	335
Asn Glu Cys Lys Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val			
	340	345	350
Leu Lys Ser Gln Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu			
	355	360	365
Asp Glu Phe Lys Cys Pro Ile Lys Glu Glu Ile Ala Leu Thr Ser Gly			
	370	375	380
Glu Trp Glu Val Leu Ala Arg His Gly Ser Lys Ile Trp Val Asn Glu			
385	390	395	400
Glu Thr Lys Leu Val Tyr Phe Gln Gly Thr Lys Asp Thr Pro Leu Glu			
	405	410	415
His His Leu Tyr Val Val Ser Tyr Glu Ala Ala Gly Glu Ile Val Arg			
	420	425	430
Leu Thr Thr Pro Gly Phe Ser His Ser Cys Ser Met Ser Gln Asn Phe			
	435	440	445
Asp Met Phe Val Ser His Tyr Ser Ser Val Ser Thr Pro Pro Cys Val			
	450	455	460
His Val Tyr Lys Leu Ser Gly Pro Asp Asp Asp Pro Leu His Lys Gln			
465	470	475	480
Pro Arg Phe Trp Ala Ser Met Met Glu Ala Ala Ser Cys Pro Pro Asp			
	485	490	495
Tyr Val Pro Pro Glu Ile Phe His Phe His Thr Arg Ser Asp Val Arg			
	500	505	510
Leu Tyr Gly Met Ile Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys			
	515	520	525
His Pro Thr Val Leu Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val			
	530	535	540
Asn Asn Ser Phe Lys Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala			
545	550	555	560

Ser	Leu	Gly	Tyr	Ala	Val	Val	Val	Ile	Asp	Gly	Arg	Gly	Ser	Cys	Gln
				565			570				575				
Arg	Gly	Leu	Arg	Phe	Glu	Gly	Ala	Leu	Lys	Asn	Gln	Met	Gly	Gln	Val
				580			585				590				
Glu	Ile	Glu	Asp	Gln	Val	Glu	Gly	Pro	Gln	Phe	Val	Ala	Glu	Lys	Tyr
				595			600				605				
Gly	Phe	Ile	Asp	Leu	Ser	Arg	Val	Ala	Ile	His	Gly	Trp	Ser	Tyr	Gly
				610			615				620				
Gly	Phe	Leu	Ser	Leu	Met	Gly	Leu	Ile	His	Lys	Pro	Gln	Val	Phe	Lys
625				630			635				640				
Val	Ala	Ile	Ala	Gly	Ala	Pro	Val	Thr	Val	Trp	Met	Ala	Tyr	Asp	Thr
				645			650				655				
Gly	Tyr	Thr	Glu	Arg	Tyr	Met	Asp	Val	Pro	Glu	Asn	Asn	Gln	His	Gly
				660			665				670				
Tyr	Glu	Ala	Gly	Ser	Val	Ala	Leu	His	Val	Glu	Lys	Leu	Pro	Asn	Glu
				675			680				685				
Pro	Asn	Arg	Leu	Leu	Ile	Leu	His	Gly	Phe	Leu	Asp	Glu	Asn	Val	His
690				695			700								
Phe	Phe	His	Thr	Asn	Phe	Leu	Val	Ser	Gln	Leu	Ile	Arg	Ala	Gly	Lys
705				710			715				720				
Pro	Tyr	Gln	Leu	Gln	Ile	Tyr	Pro	Asn	Glu	Arg	His	Ser	Ile	Arg	Cys
				725			730				735				
Pro	Glu	Ser	Gly	Glu	His	Tyr	Glu	Val	Thr	Leu	Leu	His	Phe	Leu	Gln
				740			745				750				
Glu	Tyr	Leu													
755															

<210> 4973

<211> 268

<212> PRT

<213> Homo sapiens

<400> 596

Met Ala Ala Ala Ile Thr Asp Met Ala Asp Leu Glu Glu Leu Ser Arg
1 5 10 15

Leu Ser Pro Leu Pro Pro Gly Ser Pro Gly Ser Ala Ala Arg Gly Arg
 20 25 30
 Ala Glu Pro Pro Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
 35 40 45
 Ala Glu Ala Glu Ala Val Ala Ala Leu Leu Leu Asn Gly Gly Ser Gly
 50 55 60
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Val Gly Gly Gly Glu Ala Glu
 65 70 75 80
 Thr Met Ser Glu Pro Ser Pro Glu Ser Ala Ser Gln Ala Gly Glu Asp
 85 90 95
 Glu Asp Glu Glu Glu Asp Asp Glu Glu Glu Glu Asp Glu Ser Ser Ser
 100 105 110
 Ser Gly Gly Gly Glu Glu Glu Ser Ser Ala Glu Ser Leu Val Gly Ser
 115 120 125
 Ser Gly Gly Ser Ser Ser Asp Glu Thr Arg Ser Leu Ser Pro Gly Ala
 130 135 140
 Ala Ser Ser Ser Ser Gly Asp Gly Asp Gly Lys Glu Gly Leu Glu Glu
 145 150 155 160
 Pro Lys Gly Pro Arg Gly Ser Gln Gly Gly Gly Gly Gly Gly Ser Ser
 165 170 175
 Ser Ser Ser Val Val Ser Ser Gly Gly Asp Glu Gly Tyr Gly Thr Gly
 180 185 190
 Gly Gly Gly Ser Ser Ala Thr Ser Gly Gly Arg Arg Gly Ser Leu Glu
 195 200 205
 Met Ser Ser Asp Gly Glu Pro Leu Ser Arg Met Asp Ser Glu Asp Ser
 210 215 220
 Ile Ser Ser Thr Ile Met Asp Val Asp Ser Thr Ile Ser Ser Gly Arg
 225 230 235 240
 Ser Thr Pro Ala Met Met Asn Gly Gln Gly Ser Thr Thr Ser Ser Ser
 245 250 255
 Lys Asn Ile Ala Tyr Asn Cys Cys Trp Asp Gln Cys
 260 265

<210> 4974

<211> 160

<212> PRT

<213> Homo sapiens

<400> 597

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Met Leu Gly Glu Arg Pro Leu Cys Leu Thr Pro Gly Ala Lys Leu Gly
  1             5             10             15
Leu His His Trp Ile Ile Arg Cys Phe Gln Arg Arg Pro Ser Pro His
          20             25             30
Pro Asp Gln Gly Asn Trp Asp Asp Val Gly Pro Leu Thr Leu Ser Asp
          35             40             45
Met Gln Pro Gly Trp Arg Leu Gly Gln Pro Pro Cys Arg Ser Glu Ser
          50             55             60
Phe Ser Pro Cys His Leu Lys Ser Lys Ser Leu Leu Thr Gln Ala Leu
  65             70             75             80
Pro Gly Met Cys Ser Pro Ala Thr Glu Pro Glu Ala Ala Leu Leu Leu
          85             90             95
Ser Pro Val Gly Thr Ala Phe Gln Thr Gln Asn Thr Glu Phe Thr Ala
          100            105            110
Ser Phe Gly Ile Phe Pro Asn Arg Leu Thr Val Pro Ile Ala Ser Asp
          115            120            125
Pro Phe Gln Tyr Ser Cys Thr Arg Asn Val Met Val Lys Asn Lys Lys
          130            135            140
Pro Pro Val Met Glu Gly Arg Asn Met Asn Gln Leu Lys Ala Phe His
          145            150            155            160

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<210> 4975

<211> 411

<212> PRT

<213> Homo sapiens

<400> 598

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Met Thr Glu Met Ser Glu Lys Glu Asn Glu Pro Asp Asp Ala Ala Thr
  1             5             10             15
His Ser Pro Pro Gly Thr Val Ser Ala Leu Gln Glu Thr Lys Leu Gln
          20             25             30

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Arg Phe Lys Arg Ser Leu Ser Leu Lys Thr Ile Leu Arg Ser Lys Ser
 35 40 45
 Leu Glu Asn Phe Phe Leu Arg Ser Gly Ser Glu Leu Lys Cys Pro Thr
 50 55 60
 Glu Val Leu Leu Thr Pro Pro Thr Pro Leu Pro Pro Pro Ser Pro Pro
 65 70 75 80
 Pro Thr Ala Ser Asp Arg Gly Leu Ala Thr Pro Ser Pro Ser Pro Cys
 85 90 95
 Pro Val Pro Arg Pro Leu Ala Ala Leu Lys Pro Val Arg Leu His Ser
 100 105 110
 Phe Gln Glu His Val Phe Lys Arg Ala Ser Pro Cys Glu Leu Cys His
 115 120 125
 Gln Leu Ile Val Gly Asn Ser Lys Gln Gly Leu Arg Cys Lys Met Cys
 130 135 140
 Lys Val Ser Val His Leu Trp Cys Ser Glu Glu Ile Ser His Gln Gln
 145 150 155 160
 Cys Pro Gly Lys Thr Ser Thr Ser Phe Arg Arg Asn Phe Ser Ser Pro
 165 170 175
 Leu Leu Val His Glu Pro Pro Pro Val Cys Ala Thr Ser Lys Glu Ser
 180 185 190
 Pro Pro Thr Gly Asp Ser Gly Lys Val Asp Pro Val Tyr Glu Thr Leu
 195 200 205
 Arg Tyr Gly Thr Ser Leu Ala Leu Met Asn Arg Ser Ser Phe Ser Ser
 210 215 220
 Thr Ser Glu Ser Pro Thr Arg Ser Leu Ser Glu Arg Asp Glu Leu Thr
 225 230 235 240
 Glu Asp Gly Glu Gly Ser Ile Arg Ser Ser Glu Glu Gly Pro Gly Asp
 245 250 255
 Ser Ala Ser Pro Val Phe Thr Ala Pro Ala Glu Ser Glu Gly Pro Gly
 260 265 270
 Pro Glu Glu Lys Ser Pro Gly Gln Gln Leu Pro Lys Ala Thr Leu Arg
 275 280 285
 Lys Asp Val Gly Pro Met Tyr Ser Tyr Val Ala Leu Tyr Lys Phe Leu
 290 295 300
 Pro Gln Glu Asn Asn Asp Leu Ala Leu Gln Pro Gly Asp Arg Ile Met
 305 310 315 320

Leu	Val	Asp	Asp	Ser	Asn	Glu	Asp	Trp	Trp	Lys	Gly	Lys	Ile	Gly	Asp	
325							330				335					
Arg	Val	Gly	Phe	Phe	Pro	Ala	Asn	Phe	Val	Gln	Arg	Val	Arg	Pro	Gly	
340							345				350					
Glu	Asn	Val	Trp	Arg	Cys	Cys	Gln	Pro	Phe	Ser	Gly	Asn	Lys	Glu	Gln	
355							360				365					
Gly	Tyr	Met	Ser	Leu	Lys	Glu	Asn	Gln	Ile	Cys	Val	Gly	Val	Gly	Arg	
370							375				380					
Ser	Lys	Asp	Ala	Asp	Gly	Phe	Ile	Arg	Val	Ser	Ser	Gly	Lys	Lys	Arg	
385							390				395				400	
Gly	Leu	Val	Pro	Val	Asp	Ala	Leu	Thr	Glu	Ile						
405							410									

<210> 4976

<211> 129

<212> PRT

<213> Homo sapiens

<400> 599

Met	Leu	Ser	Ala	Gly	Gly	Cys	Ile	Leu	Leu	Pro	Val	His	Ile	Val	Cys
1				5					10					15	
Ala	Trp	Asp	Gly	His	Glu	Ser	Gly	Gly	Arg	Ala	Gly	Val	Leu	Ala	Leu
			20					25					30		
Gly	Tyr	Phe	Gly	Glu	Thr	Ile	Arg	Phe	Lys	Glu	Gly	Asn	Thr	Phe	Ser
		35					40					45			
Gly	Pro	Val	Pro	Gln	Asn	Thr	Thr	Ile	Thr	Arg	Gly	Arg	His	Leu	Ala
	50					55				60					
Glu	Leu	Ser	Pro	Thr	Gly	Thr	Ser	Gly	Pro	Trp	Phe	Leu	His	Pro	Gln
65					70					75				80	
Ser	Ala	Ser	Phe	His	Ser	Arg	Gln	Asn	Gln	Gly	Ile	Phe	Gln	Gly	Gln
			85						90					95	
Val	Ser	His	Pro	Leu	Gly	Ala	Gly	Ile	Leu	Ser	His	Ser	Lys	Thr	Asn
			100					105					110		
Phe	Gln	Val	Pro	Gly	Leu	Leu	Gly	Asn	Pro	Lys	Arg	Leu	Ser	Pro	Ala
	115						120					125			

Glu

<210> 4977

<211> 156

<212> PRT

<213> Homo sapiens

<400> 600

Met Gln Thr Glu Asp Ile Arg Leu Glu Pro Asp Leu Tyr Glu Ala Cys

1 5 10 15

Lys Ser Asp Ile Lys Asn Phe Cys Ser Ala Val Gln Tyr Gly Asn Ala

20 25 30

Gln Ile Ile Glu Cys Leu Lys Glu Asn Lys Lys Gln Leu Ser Thr Arg

35 40 45

Cys His Gln Lys Val Phe Lys Leu Gln Glu Thr Glu Met Met Asp Pro

50 55 60

Glu Leu Asp Tyr Thr Leu Met Arg Val Cys Lys Gln Met Ile Lys Arg

65 70 75 80

Phe Cys Pro Glu Ala Asp Ser Lys Thr Met Leu Gln Cys Leu Lys Gln

85 90 95

Asn Lys Asn Ser Glu Leu Met Asp Pro Lys Cys Lys Gln Met Ile Thr

100 105 110

Lys Arg Gln Ile Thr Gln Asn Thr Gly Lys Ile Leu Ala Trp Leu Ser

115 120 125

Trp Pro Arg Gly Val Ser Glu Lys Glu Phe Ser Gly Cys Arg Val Thr

130 135 140

Cys Ser Asn Ser Gln Gly Phe Val Ala Trp Glu Phe

145 150 155

<210> 4978

<211> 183

<212> PRT

<213> Homo sapiens

<400> 601

Met Glu Leu Ala Ala Leu Gly Leu Ser Pro Cys Pro Arg Leu Leu His
 1 5 10 15
 Ala Glu Leu Leu Pro Gly Leu Leu Thr Val Phe Ser Leu Arg Phe Leu
 20 25 30
 Gln Asp Tyr Gly Gly Tyr Leu Ser Thr Tyr Ile Leu Pro Ala Lys Gly
 35 40 45
 Glu Asn Gln Gly Gln Thr Phe Thr Cys Gly Ser Ala Leu Ser Pro Ile
 50 55 60
 Thr Asp Phe Lys Leu Tyr Ala Ser Ala Phe Ser Glu Arg Tyr Leu Gly
 65 70 75 80
 Leu His Gly Thr Arg Asp Asn Ala Val Pro Ala Ala Ala Pro Pro Pro
 85 90 95
 Gly Ala Arg Glu Thr Gly Thr Pro Arg Pro Leu Pro Gln Gly Thr Glu
 100 105 110
 Gln Arg Met Val Ala Ala Gly Pro Thr Arg Ala His Arg Thr Pro Ala
 115 120 125
 Pro Arg Phe Gln Pro Pro Ser Gly Ser Met Arg Pro Ala His Thr Ser
 130 135 140
 Leu Cys Val Pro Val Arg Asp Ile Thr Pro Cys Leu Thr Ser Gln Cys
 145 150 155 160
 His Gly Arg Ser Ser Tyr Ser Thr Ile Val Leu Ala Val Arg Val His
 165 170 175
 Ile Trp Ala Cys Tyr Phe Leu
 180

<210> 4979

<211> 579

<212> PRT

<213> Homo sapiens

<400> 602

Met Lys Asp Lys Ser Asn Gly Leu Glu Ser Gln Val Asn Gln Cys Asp
 1 5 10 15

Lys Met Leu Gly Gly Asp Ala Leu Val Thr Asp Leu Leu Val Asp Phe
 20 25 30
 Cys Gly Ser Arg Ser Gly Val Glu Ile Pro Arg Thr Pro Gln Leu Tyr
 35 40 45
 Val Ala His Glu Ile Gly Thr Ile Lys Thr Val Thr Pro Pro Glu Asp
 50 55 60
 Arg Asp Ser Glu Ser Gly Val Val Gly Gly Gln Gly Thr Leu Gln Glu
 65 70 75 80
 Pro Gly Phe Gly Glu Ala Ser Glu Ala Ile Ser Val Ser Arg Asn Arg
 85 90 95
 Gln Pro Ile Pro Leu Leu Met Asn Lys Glu Asn Ser Thr Lys Thr Ser
 100 105 110
 Lys Val Glu Leu Thr Leu Ala Ser Pro Tyr Met Lys Gln Glu Lys Glu
 115 120 125
 Glu Glu Lys Glu Gly Phe Ser Glu Ser Asp Phe Ser Asp Gly Asn Thr
 130 135 140
 Ser Ser Asn Ala Glu Ser Trp Arg Asn Pro Ser Ser Ser Glu Glu Glu
 145 150 155 160
 Pro Ser Pro Val Leu Lys Thr Leu Glu Arg Ser Ala Ala Arg Lys Met
 165 170 175
 Pro Ser Lys Ser Leu Glu Asp Ile Ser Ser Asp Ser Ser Asn Gln Ala
 180 185 190
 Lys Val Asp Asn Gln Pro Glu Glu Leu Val Arg Ser Ala Glu Asp Asp
 195 200 205
 Glu Lys Pro Asp Gln Lys Pro Val Thr Asn Glu Cys Val Pro Arg Ile
 210 215 220
 Ser Thr Val Pro Thr Gln Pro Asp Asn Pro Phe Ser His Pro Asp Lys
 225 230 235 240
 Leu Lys Arg Met Ser Lys Ser Val Pro Ala Phe Leu Gln Asp Glu Val
 245 250 255
 Ser Gly Ser Val Met Ser Val Tyr Ser Gly Asp Phe Gly Asn Leu Glu
 260 265 270
 Val Lys Gly Asn Ile Gln Phe Ala Ile Glu Tyr Val Glu Ser Leu Lys
 275 280 285
 Glu Leu His Val Phe Val Ala Gln Cys Lys Asp Leu Ala Ala Val Asp
 290 295 300

Val Lys Lys Gln Arg Ser Asp Pro Tyr Val Lys Ala Tyr Leu Leu Pro
 305 310 315 320
 Asp Lys Gly Lys Met Gly Lys Lys Lys Thr Leu Val Val Lys Lys Thr
 325 330 335
 Leu Asn Pro Val Tyr Asn Glu Ile Leu Arg Tyr Lys Ile Glu Lys Gln
 340 345 350
 Ile Leu Lys Thr Gln Lys Leu Asn Leu Ser Ile Trp His Arg Asp Thr
 355 360 365
 Phe Lys Arg Asn Ser Phe Leu Gly Glu Val Glu Leu Asp Leu Glu Thr
 370 375 380
 Trp Asp Trp Asp Asn Lys Gln Asn Lys Gln Leu Arg Trp Tyr Pro Leu
 385 390 395 400
 Lys Arg Lys Thr Ala Pro Val Ala Leu Glu Ala Glu Asn Arg Gly Glu
 405 410 415
 Met Lys Leu Ala Leu Gln Tyr Val Pro Glu Pro Val Pro Gly Lys Lys
 420 425 430
 Leu Pro Thr Thr Gly Glu Val His Ile Trp Val Lys Glu Cys Leu Asp
 435 440 445
 Leu Pro Leu Leu Arg Gly Ser His Leu Asn Ser Phe Val Lys Cys Thr
 450 455 460
 Ile Leu Pro Asp Thr Ser Arg Lys Ser Arg Gln Lys Thr Arg Ala Val
 465 470 475 480
 Gly Lys Thr Thr Asn Pro Ile Phe Asn His Thr Met Val Tyr Asp Gly
 485 490 495
 Phe Arg Pro Glu Asp Leu Met Glu Ala Cys Val Glu Leu Thr Val Trp
 500 505 510
 Asp His Tyr Lys Leu Thr Asn Gln Phe Leu Gly Gly Leu Arg Ile Gly
 515 520 525
 Phe Gly Thr Gly Lys Ser Tyr Gly Thr Glu Val Asp Trp Met Asp Ser
 530 535 540
 Thr Ser Glu Glu Val Ala Leu Trp Glu Lys Met Val Asn Ser Pro Asn
 545 550 555 560
 Thr Trp Ile Glu Ala Thr Leu Pro Leu Arg Met Leu Leu Ile Ala Lys
 565 570 575
 Ile Ser Lys

<210> 4980

<211> 261

<212> PRT

<213> Homo sapiens

<400> 603

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Met Arg Ser Leu Leu Leu Ser Ala Phe Cys Leu Leu Glu Ala Ala
  1             5             10             15
Leu Ala Ala Glu Val Lys Lys Pro Ala Ala Ala Ala Pro Gly Thr
             20             25             30
Ala Glu Lys Leu Ser Pro Lys Ala Ala Thr Leu Ala Glu Arg Ser Ala
             35             40             45
Gly Leu Ala Phe Ser Leu Tyr Gln Ala Met Ala Lys Asp Gln Ala Val
             50             55             60
Glu Asn Ile Leu Val Ser Pro Val Val Val Ala Ser Ser Leu Gly Leu
             65             70             75             80
Val Ser Leu Gly Gly Lys Ala Thr Thr Ala Ser Gln Ala Lys Ala Val
             85             90             95
Leu Ser Ala Glu Gln Leu Arg Asp Glu Glu Val His Ala Gly Leu Gly
             100            105            110
Glu Leu Leu Arg Ser Leu Ser Asn Ser Thr Ala Arg Asn Val Thr Trp
             115            120            125
Lys Leu Gly Ser Arg Leu Tyr Gly Pro Ser Ser Val Ser Phe Ala Asp
             130            135            140
Asp Phe Val Arg Ser Ser Lys Gln His Tyr Asn Cys Glu His Ser Lys
             145            150            155            160
Ile Asn Phe Arg Asp Lys Arg Ser Ala Leu Gln Ser Ile Asn Glu Trp
             165            170            175
Ala Ala Gln Thr Thr Asp Gly Lys Leu Pro Glu Val Thr Lys Asp Val
             180            185            190
Glu Arg Thr Asp Gly Ala Leu Leu Val Asn Ala Met Phe Phe Lys Arg
             195            200            205
Glu Ser Gly Ala Arg Ser Gly Val Leu Leu Leu Leu Pro Gly Pro Pro
             210            215            220

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Ala Arg Val Arg Thr Thr Phe Arg Ala Leu His Ser Ser Leu Pro Leu
 225 230 235 240
 Ile Tyr Ala Val Thr Thr Gln Gly Gly Arg Thr Val Thr Gln Leu Phe
 245 250 255
 Val Gln Thr Gly Asn
 260

<210> 4981

<211> 281

<212> PRT

<213> Homo sapiens

<400> 604

Met Ala Glu Ala Ala Pro Ala Arg Asp Pro Glu Thr Asp Lys His Thr
 1 5 10 15
 Glu Asp Gln Ser Pro Ser Thr Pro Leu Pro Gln Pro Ala Ala Glu Lys
 20 25 30
 Asn Ser Tyr Leu Tyr Ser Thr Glu Ile Thr Leu Trp Thr Val Val Ala
 35 40 45
 Ala Ile Gln Ala Leu Glu Lys Lys Val Asp Ser Cys Leu Thr Arg Leu
 50 55 60
 Leu Thr Leu Glu Gly Arg Thr Gly Thr Ala Glu Lys Lys Leu Ala Asp
 65 70 75 80
 Cys Glu Lys Thr Ala Val Glu Phe Gly Asn Gln Leu Glu Gly Lys Trp
 85 90 95
 Ala Val Leu Gly Thr Leu Leu Gln Glu Tyr Gly Leu Leu Gln Arg Arg
 100 105 110
 Leu Glu Asn Val Glu Asn Leu Leu Arg Asn Arg Asn Phe Trp Ile Leu
 115 120 125
 Arg Leu Pro Pro Gly Ser Lys Gly Glu Ala Pro Lys Val Pro Val Thr
 130 135 140
 Phe Asp Asp Val Ala Val Tyr Phe Ser Glu Leu Glu Trp Gly Lys Leu
 145 150 155 160
 Glu Asp Trp Gln Lys Glu Leu Tyr Lys His Val Met Arg Gly Asn Tyr
 165 170 175

Glu Thr Leu Val Ser Leu Asp Tyr Ala Ile Ser Lys Pro Asp Ile Leu
 180 185 190
 Thr Arg Ile Glu Arg Gly Glu Glu Pro Cys Leu Asp Arg Trp Gly Gln
 195 200 205
 Glu Lys Gly Asn Glu Val Glu Val Gly Arg Pro Arg Met Met Gly Thr
 210 215 220
 Gly Leu Pro Pro Tyr Pro Glu His Leu Thr Ser Pro Leu Ser Pro Ala
 225 230 235 240
 Gln Glu Glu Leu Lys Glu Gly Gln Ala Pro Lys Gln Gln Gln Asp Ser
 245 250 255
 Glu Ala Arg Val Ala Pro Ala Gly Pro Glu Ala Gly Leu Ala Leu Arg
 260 265 270
 Thr Asp Leu Gln Gly Glu Ala Gln Ile
 275 280

<210> 4982

<211> 126

<212> PRT

<213> Homo sapiens

<400> 605

Met Ser Pro Pro Pro Leu Leu Phe Pro Gly Pro Ser His His His Val
 1 5 10 15
 Ser Pro Gly Leu Leu His Ala Pro Pro Thr Trp Ser Pro His Phe Cys
 20 25 30
 Pro Gly Arg Gly Trp Cys Val Leu His Pro Ala Thr Gln Gln Ser Glu
 35 40 45
 Gly Ser Ser Tyr Asn Ile Ser Gln Ile Thr Ser Leu Phe Ala Gln Asn
 50 55 60
 Pro Ala Met Ala Pro Ile Ser Phe Arg Val Asn Ser Lys Ala Pro Tyr
 65 70 75 80
 Leu Pro Thr Ala Pro His Ser Arg Thr Phe Pro Pro Val Val Leu Pro
 85 90 95
 Leu Val Pro Ser Ile Pro Ala Thr Gly Ile Ser Leu Leu Ala Pro Glu
 100 105 110

Leu Thr Arg Tyr Gly Ala Ala Ser Gly Pro Leu His Leu Gln
 115 120 125

<210> 4983

<211> 266

<212> PRT

<213> Homo sapiens

<400> 606

Met Val Met Ala Asp Gln Asn Gln Val Trp Val Gly Ser Glu Asp Ser
 1 5 10 15
 Val Ile Tyr Ile Ile Asn Val His Ser Met Ser Cys Asn Lys Gln Leu
 20 25 30
 Thr Ala His Cys Ser Ser Val Thr Asp Leu Ile Val Gln Asp Gly Gln
 35 40 45
 Glu Ala Pro Ser Asn Val Tyr Ser Cys Ser Met Asp Gly Met Val Leu
 50 55 60
 Val Trp Asn Val Ser Thr Leu Gln Val Thr Ser Arg Phe Gln Leu Pro
 65 70 75 80
 Arg Gly Gly Leu Thr Ser Ile Arg Leu His Gly Gly Arg Leu Trp Cys
 85 90 95
 Cys Thr Gly Asn Ser Ile Met Val Met Lys Met Asn Gly Ser Leu His
 100 105 110
 Gln Glu Leu Lys Ile Glu Glu Asn Phe Lys Asp Thr Ser Thr Ser Phe
 115 120 125
 Leu Ala Phe Gln Leu Leu Pro Glu Glu Glu Gln Leu Trp Ala Ala Cys
 130 135 140
 Ala Gly Arg Ser Glu Val Tyr Ile Trp Ser Leu Lys Asp Leu Ala Gln
 145 150 155 160
 Pro Pro Gln Arg Val Pro Leu Glu Asp Cys Ser Glu Ile Asn Cys Met
 165 170 175
 Ile Arg Val Lys Lys Gln Val Gly Trp Arg Ala Arg His Pro Gln His
 180 185 190
 Pro Arg Gln Val Ser Leu Ala Leu Ala Ala Ser Pro Cys Ser Arg Glu
 195 200 205

Pro Ala Ala Arg Pro Arg Ala Leu Leu Pro Ser Pro Leu Arg Val Pro
 210 215 220
 Leu Leu Thr Gly Thr Cys Arg Val Gly Ala Asn Gly Pro Thr Gly His
 225 230 235 240
 His Val Leu Val Ser Trp Cys Gly Pro Ser Thr Pro Gln Arg Ile Pro
 245 250 255
 Pro Asn Trp Met Ala Ser Asn Asp Arg Thr
 260 265

<210> 4984

<211> 251

<212> PRT

<213> Homo sapiens

<400> 607

Met Gly Met Gly Thr Leu Ala Trp Gly Gln Pro Leu Leu Pro Arg Cys
 1 5 10 15
 Leu Cys Pro Arg Ala Gly Gln Arg Gln Pro Val Val Thr Ala Ala Val
 20 25 30
 Ala Ala Pro Gln Leu Thr Met Asn Asp Phe Ser Val His Arg Ile Ile
 35 40 45
 Gly Arg Gly Gly Phe Gly Glu Val Tyr Gly Cys Arg Lys Ala Asp Thr
 50 55 60
 Gly Lys Met Tyr Ala Met Lys Cys Leu Asp Lys Lys Arg Ile Lys Met
 65 70 75 80
 Lys Gln Gly Glu Thr Leu Ala Leu Asn Glu Arg Ile Met Leu Ser Leu
 85 90 95
 Val Ser Thr Gly Asp Cys Pro Phe Ile Val Cys Met Ser Tyr Ala Phe
 100 105 110
 His Thr Pro Asp Lys Leu Ser Phe Ile Leu Asp Leu Met Asn Gly Gly
 115 120 125
 Asp Leu His Tyr His Leu Ser Gln His Gly Val Phe Ser Glu Ala Asp
 130 135 140
 Met Arg Phe Tyr Ala Ala Glu Ile Ile Leu Gly Leu Glu His Met His
 145 150 155 160

Asn Arg Phe Val Val Tyr Arg Asp Leu Lys Val Ser Ala Pro Ala Val
 165 170 175
 Pro Arg Leu Asp Leu Arg Gly Cys Pro Leu Leu Pro Leu Asp Ile Pro
 180 185 190
 Ala Thr Arg Pro Arg Gly Val Gly Leu Leu Gly His Gly Arg Pro Val
 195 200 205
 Ser Ser His Leu Arg Pro Cys Pro Ser His Arg Ala Thr Leu Trp Val
 210 215 220
 Gln Val Val Ala Gly Asp Arg Arg Glu Asp Pro His Leu Cys Pro Phe
 225 230 235 240
 Phe Gly Tyr Pro Ser Ser Ser Pro Val Lys Gln
 245 250

<210> 4985

<211> 350

<212> PRT

<213> Homo sapiens

<400> 608

Met Met Glu Ser Ser Glu Leu Thr Pro Lys Gln Glu Ile Phe Lys Gly
 1 5 10 15
 Ser Glu Ser Ser Asn Ser Thr Ser Gly Gly Leu Phe Gly Val Val Pro
 20 25 30
 Gly Gly Thr Glu Thr Gly Asp Val Cys Glu Asp Thr Phe Lys Glu Leu
 35 40 45
 Glu Gly Gln Pro Ser Asn Glu Glu Gly Ser Arg Leu Glu Ser Asp Phe
 50 55 60
 Leu Glu Ile Ile Asp Glu Asp Lys Lys Lys Ser Thr Lys Asp Arg Tyr
 65 70 75 80
 Glu Glu Tyr Lys Glu Val Glu Glu His Pro Pro Leu Ser Ser Ser Pro
 85 90 95
 Val Glu His Glu Gly Val Leu Lys Gly Gln Lys Ser Tyr Arg Cys Asp
 100 105 110
 Glu Cys Gly Lys Ala Phe Tyr Trp Ser Ser His Leu Ile Gly His Arg
 115 120 125

Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys
 130 135 140
 Thr Phe Arg Gln Thr Ser Gln Leu Ile Val His Leu Arg Thr His Thr
 145 150 155 160
 Gly Glu Lys Pro Tyr Glu Cys Ser Glu Cys Gly Lys Ala Tyr Arg His
 165 170 175
 Ser Ser His Leu Ile Gln His Gln Arg Leu His Asn Gly Glu Lys Pro
 180 185 190
 Tyr Lys Cys Asn Glu Cys Ala Lys Ala Phe Asn Gln Ser Ser Lys Leu
 195 200 205
 Phe Asp His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys Lys
 210 215 220
 Glu Cys Gly Ala Ala Phe Ser Arg Ser Lys Asn Leu Val Arg His Gln
 225 230 235 240
 Phe Leu His Thr Gly Lys Lys Pro Tyr Lys Cys Asn Glu Cys Gly Arg
 245 250 255
 Ala Phe Cys Ser Asn Arg Asn Leu Ile Asp His Gln Arg Thr His Thr
 260 265 270
 Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser Arg
 275 280 285
 Ser Lys Cys Leu Ile Arg His Gln Ser Leu His Thr Gly Glu Lys Pro
 290 295 300
 Tyr Lys Cys Ser Glu Cys Gly Lys Ala Phe Asn Gln Ile Ser Gln Leu
 305 310 315 320
 Val Glu His Glu Arg Ile His Thr Gly Glu Lys Pro Phe Lys Cys Ser
 325 330 335
 Glu Cys Gly Lys Ala Phe Gly Leu Ser Lys Cys Leu Ile Arg
 340 345 350

<210> 4986

<211> 191

<212> PRT

<213> Homo sapiens

<400> 609

Met Tyr Ala Lys Arg Pro Glu Ser Phe Ser Cys Lys Lys Leu Ala Met

1	5	10	15
Ser Lys Lys Val Thr	Pro Ala Ser Thr	Gln Cys Val Arg	Phe Pro Phe
20	25	30	
Pro Ser Thr Val Val	Cys Lys Lys Asn	Leu Asp Ser Thr	Thr Val Ala
35	40	45	
Val His Gly Glu Glu	Ile Tyr Cys Lys	Ser Cys Tyr Gly	Lys Lys Tyr
50	55	60	
Gly Pro Lys Gly Tyr	Gly Tyr Gly Gln	Gly Ala Gly Thr	Leu Ser Thr
65	70	75	80
Asp Lys Gly Glu Ser	Leu Gly Ile Lys	His Glu Glu Ala	Pro Gly His
85	90	95	
Arg Pro Thr Thr Asn	Pro Asn Ala Ser	Lys Phe Ala Gln	Lys Ile Gly
100	105	110	
Gly Ser Glu Arg Cys	Pro Arg Cys Ser	Gln Ala Val Tyr	Ala Ala Glu
115	120	125	
Lys Val Ile Gly Ala	Gly Lys Ser Trp	His Lys Ala Cys	Phe Arg Cys
130	135	140	
Ala Lys Cys Gly Lys	Gly Leu Glu Ser	Thr Thr Leu Ala	Asp Lys Asp
145	150	155	160
Gly Glu Ile Tyr Cys	Lys Gly Cys Tyr	Ala Lys Asn Phe	Gly Pro Lys
165	170	175	
Gly Phe Gly Phe Gly	Gln Gly Ala Gly	Ala Leu Val His	Ser Glu
180	185	190	

<210> 4987

<211> 482

<212> PRT

<213> Homo sapiens

<400> 610

Met Trp Thr Val Pro Ser Phe Thr Asn Asp Ser Tyr Gln Val Tyr Asn

1	5	10	15
Val Phe Ser Thr Asn	Ser Phe Gln Leu	Leu Thr Val Lys	Arg Thr Pro

20	25	30
His Glu Ala Trp Arg Val Pro Leu Thr Thr Lys Thr Asn Lys Thr Lys		
35	40	45
Gly Leu Pro Asp Cys Pro Lys Lys Pro Thr Asn Gly Pro Phe Ile Val		
50	55	60
Thr Ser Ile Leu Trp Asp Asn Cys Asn Ala Pro Lys Ala Val Val Leu		
65	70	75
Gln Thr Leu Ala Met Gly Ile Val Ile Asp Trp Ala Pro Lys Gly His		
85	90	95
Tyr Trp Gln Asp Cys Ser Ser Lys Asn Thr Leu Cys Ser Glu Phe Ile		
100	105	110
Tyr Ser Leu Asp Tyr Ile Glu His Gly Trp Gln Ser Tyr Thr Met Arg		
115	120	125
Gln Arg Val Ser Pro Tyr Pro Phe Lys Trp Met Asp Thr Gly Ile Ala		
130	135	140
Pro Pro Arg Pro Lys Ile Ile His Pro Phe Phe Thr Pro Glu His Pro		
145	150	155
Glu Leu Trp Lys Leu Ala Ala Ala Leu Ser Gly Ile Lys Ile Trp Asn		
165	170	175
Thr Thr Tyr Gln Leu Leu Arg Thr Lys Thr Lys Thr Pro Thr Phe Asn		
180	185	190
Ile Thr Leu Ile Ser Glu Trp Val Ile Pro Ile Arg Ser Cys Val Lys		
195	200	205
Pro Pro Tyr Met Leu Leu Val Gly Asn Ile Ile Met Met Pro Asp Ala		
210	215	220
Gln Thr Ile Glu Cys His Asn Cys Lys Leu Phe Thr Cys Ile Asp Ala		
225	230	235
Thr Phe Asn Pro Thr Thr Ser Ile Leu Leu Val Arg Ala Arg Glu Gly		
245	250	255
Val Trp Ile Pro Val Ser Leu His Arg Pro Trp Glu Ser Ser Pro Ser		
260	265	270
Ile His Ile Val Asn Glu Val Leu Lys Asp Ile Leu Lys Arg Thr Lys		
275	280	285
Arg Phe Ile Phe Thr Leu Ile Ala Val Leu Ala Gly Leu Leu Ala Val		
290	295	300
Thr Ala Thr Ala Ala Thr Ala Gly Val Ala Ile Arg Ser Ser Val Gln		

305 310 315 320
 Thr Ala His Tyr Val Glu Ala Cys Gln Lys Asn Ser Ser Arg Leu Trp
 325 330 335
 Asn Ser Gln Ala Gln Ile Asp Gln Lys Leu Ala Asn Gln Ile Asn Asp
 340 345 350
 Leu Arg Gln Ser Val Thr Trp Leu Gly Asp Arg Val Met Asn Leu Gln
 355 360 365
 His Arg Met Gln Leu Gln Cys Asp Trp Asn Thr Ser Asp Tyr Cys Ile
 370 375 380
 Thr Pro Tyr Ala Tyr Asn Gln Asp Gln His Ser Trp Glu Asn Val Ser
 385 390 395 400
 Arg His Leu Lys Ala Trp Asp Asp Asn Leu Thr Leu Asp Ile Ser Gln
 405 410 415
 Leu Lys Glu Gln Ile Phe Glu Ala Ser Gln Val His Leu Ser Thr Val
 420 425 430
 Pro Gly Ser His Ile Phe Glu Gly Ile Thr Lys Gln Leu Pro Asp Phe
 435 440 445
 Asn Pro Phe Lys Trp Leu Lys Pro Val Arg Gly Ser Leu Leu Leu Leu
 450 455 460
 Ala Leu Leu Ile Leu Val Cys Leu Cys Cys Leu Leu Leu Val Cys Arg
 465 470 475 480
 Cys Leu

<210> 4988

<211> 465

<212> PRT

<213> Homo sapiens

<400> 611

Met Ala Ser Val Cys Cys Leu Pro Pro Pro Arg Ala Thr Trp Ala Ser
 1 5 10 15
 Trp Thr Arg Cys Pro Gly Cys Thr Thr Cys Trp Leu Ala Pro Thr Pro
 20 25 30
 Pro Arg Cys Trp Pro Ser Pro Trp Ser Arg Gly Gly Asp Ser Trp Pro

35	40	45
Pro Cys Pro Arg Thr Val	Pro Ser Ala Ser Gly Ala Trp	Pro Pro Cys
50	55	60
Asn Ser Ser Gly Ala Val	Arg Ser Phe Ser Leu Glu Ala Ala Glu Val	
65	70	75
Leu Val Glu His Thr Cys His Arg Gly Ala Val Thr Gly Leu Thr Ala		80
	85	90
Thr Pro Asp Gly Arg Leu Leu Phe Ser Ser Cys Ser Gln Gly Ser Leu		95
100	105	110
Ala Gln Tyr Ser Cys Ala Asp Pro Gln Trp His Val Leu Arg Val Ala		
115	120	125
Ala Asp Met Val Cys Pro Asp Ala Pro Ala Ser Pro Ser Ala Leu Ala		
130	135	140
Val Ser Arg Asp Gly Arg Leu Leu Ala Phe Val Gly Pro Ser Arg Cys		
145	150	155
Thr Val Thr Val Met Gly Ser Ala Ser Leu Asp Glu Leu Leu Arg Val		
165	170	175
Asp Ile Gly Thr Leu Asp Leu Ala Ser Ser Arg Leu Asp Ser Ala Met		
180	185	190
Ala Val Cys Phe Gly Pro Ala Ala Leu Gly Gln Leu Leu Val Ser Thr		
195	200	205
Ser Ser Asn Arg Val Val Val Leu Asp Ala Val Ser Gly Arg Ile Ile		
210	215	220
Arg Glu Leu Pro Gly Val His Pro Glu Pro Cys Pro Ser Leu Thr Leu		
225	230	235
Ser Glu Asp Ala Arg Phe Leu Leu Ile Ala Ala Gly Arg Thr Ile Lys		
245	250	255
Val Trp Asp Tyr Ala Thr Gln Ala Ser Pro Gly Pro Gln Val Tyr Ile		
260	265	270
Gly His Ser Glu Pro Val Gln Ala Val Ala Phe Ser Pro Asp Gln Gln		
275	280	285
Gln Val Leu Ser Ala Gly Asp Ala Val Phe Leu Trp Asp Val Leu Ala		
290	295	300
Thr Thr Glu Ser Asp Gln Ser Phe Pro Gly Ala Pro Pro Ala Cys Lys		
305	310	315
		320

<210> 4989
<211> 134
<212> PRT
<213> Homo sapiens

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				20				25					30		
Ser	Trp	Met	Glu	Asn	Asp	Phe	Asp	Glu	Leu	Arg	Glu	Ala	Gly	Phe	Arg
		35					40					45			
Arg	Ser	Asn	Tyr	Ser	Glu	Leu	Arg	Glu	Asp	Ile	Gln	Thr	Lys	Gly	Lys
		50				55					60				

Lys Val Glu Asn Phe Glu Lys Asn Leu Glu Glu Cys Ile Thr Arg Ile
 65 70 75 80
 Thr Asn Thr Glu Lys Cys Leu Lys Glu Leu Met Glu Leu Lys Thr Lys
 85 90 95
 Ala Arg Glu Leu Arg Glu Glu Cys Arg Ser Leu Arg Ser Arg Cys Asp
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 Gln Leu Glu Glu Arg Val Ser Ala Met Glu Asp Glu Met Asn Glu Met
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 Lys Gln Glu Gly Lys Val
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<210> 4990

<211> 589

<212> PRT

<213> Homo sapiens

<400> 614

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 35 40 45
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 50 55 60
 Lys Thr Ser Glu Gln Ala Thr Val Thr His Leu Asp Ile Val Thr Ala
 65 70 75 80
 Gln Gly Phe Lys Ala Ile Ile Asp Phe Met Tyr Ser Ala His Leu Ala
 85 90 95
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 Gln Met Thr Asp Ile Val Gln Ala Cys His Asp Phe Ile Lys Ala Ala
 115 120 125
 Leu Asp Ile Ser Ile Lys Ser Asp Ala Ser Asp Glu Leu Ala Glu Phe
 130 135 140

Glu Ile Gly Ala Ser Ser Ser Ser Ser Thr Glu Ala Leu Ile Ser Ala
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 Val Met Ala Gly Arg Ser Ile Ser Pro Trp Leu Ala Arg Arg Thr Ser
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 Pro Ala Asp Ser Ser Gly Asp Ser Ala Ile Ala Ser Cys His Asp Gly
 180 185 190
 Gly Ser Ser Tyr Gly Lys Glu Asp Gln Glu Pro Lys Ala Asp Gly Pro
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 Asp Asp Val Ser Ser Gln Pro Leu Trp Pro Gly Asp Val Gly Tyr Gly
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 225 230 235 240

 Ser Glu Leu Pro Ser Ala Lys Asp Gly Ala Val Gln Asn Ser Phe Ser
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 Glu Gln Ser Ala Gly Asp Ala Trp Gln Pro Thr Gly Arg Arg Lys Asn
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 Arg Lys Asn Lys Glu Thr Val Arg His Ile Thr Gln Gln Val Glu Asp
 275 280 285
 Asp Ser Arg Ala Ser Ser Pro Val Pro Ser Phe Leu Pro Thr Ser Gly
 290 295 300
 Trp Pro Phe Ser Ser Arg Asp Ser Asn Ala Asp Leu Ser Val Thr Glu
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 Ala Ser Ser Ser Asp Ser Arg Gly Glu Arg Ala Glu Leu Tyr Ala Gln
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 Val Glu Glu Gly Leu Leu Gly Gly Glu Ala Ser Tyr Leu Gly Pro Pro
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 Lys Phe Lys Cys Pro Tyr Cys Ser Phe Ser Ala Met His Gln Cys Ile

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Glu Ile Cys Gly Lys Lys Phe Thr Arg Arg Glu His Met Lys Arg His		
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Thr Leu Val His Ser Lys Asp Lys Lys Tyr Val Cys Lys Val Cys Ser		
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Arg Val Phe Met Ser Ala Ala Ser Val Gly Ile Arg His Gly Ser Arg		
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Arg His Gly Val Cys Thr Asp Cys Ala Gly Arg Gly Met Ala Gly Pro		
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Leu Asp His Gly Gly Gly Gly Gly Glu Gly Ser Pro Glu Ala Leu Phe		
515	520	525
Pro Gly Asp Gly Pro Tyr Leu Glu Asp Pro Glu Asp Pro Arg Gly Glu		
530	535	540
Ala Glu Glu Leu Gly Glu Asp Asp Glu Gly Leu Ala Pro Glu Asp Ala		
545	550	555
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Pro Pro Gly Gly Pro Asp Lys Asp Phe Ala Trp Leu Ser		
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<210> 4991

<211> 30

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: an artificially
synthesized oligo-cap linker sequence

<400> 4991

agcaucgagu cggccuuguu ggccuacugg 30

<210> 4992

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: an artificially synthesized oligo(dT) primer sequence

<400> 4992

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<210> 4993

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: an artificially synthesized primer sequence

<400> 4993

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<210> 4994

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: an artificially synthesized primer sequence

<400> 4994

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<210> 2001

<211> 2277

<212> DNA

<213> Homo sapiens

<400> 2001

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<210> 2002

<211> 2276

<212> DNA

<213> Homo sapiens

<400> 2002

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<210> 2003

<211> 2076

<212> DNA

<213> Homo sapiens

<400> 2003

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<210> 2004

<211> 2525

<212> DNA

<213> Homo sapiens

<400> 2004

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<210> 2005

<211> 3574

<212> DNA

<213> Homo sapiens

<400> 2005

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2079

<212> DNA

<213> Homo sapiens

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<211> 1913

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 2057

<211> 1766

<212> DNA

<213> Homo sapiens

<400> 2057

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<210> 2058

<211> 3359

<212> DNA

<213> Homo sapiens

<400> 2058

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<210> 2059

<211> 1692

<212> DNA

<213> Homo sapiens

<400> 2059

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<210> 2060

<211> 2269

<212> DNA

<213> Homo sapiens

<400> 2060

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<210> 2061

<211> 2395

<212> DNA

<213> Homo sapiens

<400> 2061

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<210> 2062

<211> 2284

<212> DNA

<213> Homo sapiens

<400> 2062

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<212> DNA

<213> Homo sapiens

<400> 2067

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